

THE EDUCATION OF THE ARCHITECT.*

Discussion at the Third Informal Conference held at the Royal Institute of British Architects, 21st February, 1917

Mr. H. V. LANCHESTER [F.] in the Chair.

THE CHAIRMAN: I imagine that you will agree with me in the view that at these informal conferences we shall be best employing our time, not in endeavouring to draft resolutions nor in framing a definite policy, but rather in eliciting ideas on the matter in hand and thus providing data for those, both within our Institute and outside it, whose qualifications impose on them the task of remodelling and amplifying existing procedure in such manner as the views expressed may suggest as desirable.

Before calling on Mr. Richardson, who is to open the discussion to-day, I should like to make a few remarks on the earlier phases of an architect's education. With regard to the later ones I am so largely in agreement with Mr. Robert Atkinson's Paper, read at the last meeting, that I will not take you over the ground he has covered.

In one sense the education of the architect cannot begin too early. It has been claimed that the faculty of observation essential in every branch of art must be encouraged as soon as it appears. It frequently is, only to be smothered by ill-devised educational methods at a later stage. The appreciation and comprehension of the facts by which we are surrounded, and their relationship measured in time and space, is the true object of education, and the observation necessary to acquire this should be in play throughout. Book studies are only useful in so far as they facilitate and quicken this. The substitution of book studies for the actual factors of life is disastrous to mental development, but this is too often the effect of the conventional type of education. Of course, specialised training may come comparatively late, but if the previous instruction has been on sound lines not only will the special studies be more easily assimilated but the bent of mind will be much more obvious when it comes to the choice of an occupation. Apart from the cases when a youth is for extraneous reasons drawn into a profession for which he is unsuited there are far too many in which this occurs through lack of the means of knowing what his natural qualifications are, these having been obscured by a false system of education.

Educationalists have begun to realise the deficiencies

of the methods still too general and to grasp the fact that where learning is a drudgery the method of imparting it is to blame. Real education, adapted to the age of the pupil, is always interesting to him, and as he advances he is most anxious to arrive at the point at which he is taking part in useful work. This point need not be postponed until the definite adoption of a life occupation. The advocates of Regional Survey have shown that many useful things can be done in school, while the Boy Scout movement owes its growth to a popular rendering of the same ideal. Such a programme introduces contacts with life and work which are of the greatest value in developing initiative and in encouraging a point of view, so that the young no longer feel their future careers to be things remote and apart from the educational stage of life. They know more of the world at large and are better prepared to assist in the choice of their future work.

I am indebted to Professor Fleure for the suggestion that there should be a period of State service according to capacity, on no account necessarily military, in order that the functions of citizenship, in its broadest sense, should be appreciated. Whether this be practicable or not, in some way or other the sense of communal life as qualifying individual aggrandisement should be acquired. In regard to this, the altruistic aspect, one must not be thought to undervalue the teachings of religion when one affirms that they have not, as a rule, been able to dominate social relationships.

To pass from the general to the particular—namely, the consideration of our profession and its educational needs—much as one would like to assume as a basis the type of preparatory education previously hinted at, this is at the present moment so rare that such an assumption will detract from the utility of our proposals. It is only practicable to start from the existing average, noting by the way the broader variations in antecedent training. Now this antecedent training usually falls short in affording no real knowledge of life and its realities, both material and social, so that professional education must endeavour to supply these deficiencies.

Knowledge of actual and material conditions, as the simpler of these two aspects, comes earliest, and

* See, for report of the first Conference on this subject, JOURNAL R.I.B.A. for March.

some of our technical schools deal fairly comprehensively with this, though there are still many districts where such preliminary training is inadequately provided for; while our examinations are deplorably defective as tests of this kind of knowledge. I am not exaggerating when I say that it might be possible to pass the Institute Examinations without being able to distinguish between a lump of lime and a piece of plaster, or a malleable casting and a wrought scroll.

When we come to the question of design as an aspect of social economy the business becomes more difficult. The factors that influence the standard of beauty, a complex of traditional method and logical expression, are not easily balanced, and even our leading schools of thought are not altogether at one. Then again, even among the best architects but a few are capable of imparting the skill they possess in a comprehensible way, and it follows, therefore, that the ultimate point at which knowledge can be imparted will only be reached by a proportion of those who have qualified to join the ranks of the profession. Briefly, out of the many legitimately engaged in architectural work, the architects will always be few.

Thus we see the necessity for a grading of the schools where studies leading up to architectural practice are dealt with. The principle of classification in schools is generally recognised, but the duty is imposed on us of examining the credentials of all schools where architecture is taught and of deciding to what stage they are competent to bring their pupils. If necessary we could advise such schools as to how they may best raise their standard of qualification. At the same time it is also incumbent on us to study our own examination with a view to bringing it into accord with the general principles we lay down, bearing in mind that there are aspects with which the ordinary forms of examination cannot adequately deal.

MR. A. E. RICHARDSON [*F.*] read the following Paper:—

In opening my Paper with two extracts from the correspondence of Lord Chesterfield to his son, when the latter was making the grand tour in Italy, a twofold purpose is held in view having a bearing on my subsequent remarks. The first is from a letter dated London, July 30th, 1749. It reads:

Your time is, now particularly, inestimable; and every hour of it, at present, worth more than a year will be to you twenty years hence. You are now laying the foundation of your future character and fortune; and one single stone wanting in that foundation is of more consequence than fifty in the superstructure; which can always be mended and embellished if the foundation is solid. To carry on the metaphor of building: I would wish you to be a Corinthian edifice, upon a Tuscan foundation; the latter having the utmost strength and solidity to support, and the former all possible ornaments to decorate. The Tuscan column is coarse, clumsy and unpleasant; nobody looks at it twice; the Corinthian fluted column is beautiful and attractive; but, without a solid foundation, can hardly be seen twice, because it must soon tumble down.

The contempt in which the practical side of archi-

ture was held by the amateur in those days is shown in these lines.

It would not be amiss, if you employed three or four days in learning the five orders of architecture, with their general proportions; and you may know all that you need know of them in that time. Palladio's own book of architecture is the best you can make use of for that purpose, skipping over the lowest mechanical parts of it, such as the materials, the cement etc.

The second letter, written in October 17th of the same year by Lord Chesterfield to his son, who was then at Verona, is even now remarkable. After outlining the orders and approving the fact that the tutor had arranged for a course of lessons to be received by the son from Vicentini, Lord Chesterfield continues:

You may soon be acquainted with the considerable parts of Civil Architecture; and for the minute and mechanical parts of it, leave them to masons, bricklayers and Lord Burlington; who has, to a certain degree, lessened himself by knowing them too well.

The study of building has advanced very considerably since those days, in its practical aspects at least, if not in the direction of nobler attainments which, after all, should be the goal of every true builder. It is not my intention to take a pessimistic view of the existing system of education countenanced by this Institute, and improved upon in practice at those universities and schools where building is studied; on the contrary, we have every reason to be proud of what has been done to encourage young architects to make themselves acquainted with the innumerable branches of their profession. Much remains to be done for improvement in teaching, especially in the higher divisions of theory and practice, but reflection will show that it has always been the policy of this Institute to encourage a blending of the strictly utilitarian with the ornamental and the beautiful. These two factors can never be dissociated, for building is as much a science as it is an art; and he who attempts to exploit the one at the expense of the other would be ill-advised. The question before us is not to decide whether building is an art or a science, but to so order its study that it will become a highly scientific art.

We now come to the important question of the mechanical and material branches of practice, and their relation to concept—namely, the purpose, expression, character and beauty of specific buildings, and we can in this regard compare them with the structure of the human body. Walls, timber, steel, ferro-concrete, provide the skeleton, but of what value are these attributes if they produce deformity? The student who has been encouraged to consider the manifold branches of his profession in regard to their ultimate purpose is surely better equipped for dealing with intricate problems than one who has little idea of co-ordinating these very essential factors and incorporating them into an ordered work of public utility. Just as the sculptor or the painter builds up his knowledge of the figure by an exhaustive study of anatomy, so the architect must acquire a deep knowledge of materials and new methods of construction,

the handling of which, with skill and confidence, will ensure greater perfection in his work. This is the routine side of architectural education—not that the design branch is one whit the less important, it is universally acknowledged to be the more difficult. The weakness of the present system inheres in the fact that sufficient attention has not been given to the correlation of the two branches. As an honorary examiner in design for the past five years, and speaking from experience in this regard, only those students passed the test who had enjoyed the benefits of training at the leading schools and showed an appreciation of construction and its relation to conception. Acting on the suggestion of Mr. Crompton, the examiner in construction, Mr. Redfern and myself collaborated with that gentleman in order that the questions in both subjects should have some relation the one to the other. It is not betraying any secrets to say that the results were very encouraging. Perhaps this system will be further extended.

There is a tendency in some quarters, arising out of the contrasts brought to light by the war, to applaud the scientific methods of the Germans. We are told that the educational system in Germany has resulted in a better understanding of building; this, however, is a debatable argument. From the standpoint of chemistry applied to materials, of engineering science applied to structure, and the dragooning of the subject into ways of discipline and tidiness, a repulsive architectural expression has been evolved, but the result does not compare favourably with the refined, humanistic countenance of building in France or with the official dignity of public works in America. By all means let the chemists and the engineers of this country investigate the abundance of available material; the architect will not be slow to profit by their researches; life, however, is unfortunately too short for a student to become a complete chemist, or even a passable engineer, and at the same time acquire distinction as a capable architect. It will be sufficient if he is encouraged to become a sound builder with warm feelings towards his fellows and a determination to give of his best. When we consider the newer responsibilities facing the architect to-day, we realise how essential it is that he should be thoroughly trained and acquainted with the many and intricate ramifications of practice. There are, nevertheless, limitations to his capacity, and it is the duty of this Institute as an advisory body, granting a degree of proficiency to suitable men, to define what these limitations are. If it is true that education on the mechanic side needs careful revision and adjustment, it is more than urgent that the higher branches of training—namely, investigation of history bearing on design, and the sphere of design proper—should receive increased attention, for English architects have a reputation in the one branch and not in the other.

We have at this juncture unique opportunities of studying the latest modern expression in building in France and America. What do we find?—a new

system of building arising out of new methods of construction? No! Contrary to expectation, we find the reverse to be the case. The trained and scholarly builders of both countries have realised that construction is subordinate to conception, and are content, in all humility, to compete with the masterpieces of tradition, and to fashion the bodies of their buildings according to the taste and judgment of centuries, while employing recent discoveries in materials and science to the making of the skeleton. Does this not clearly show that a new system of architectural expression is beyond the scope of the individual, and that the underlying laws of architectural composition, call it the scientific ordering of parts if you like, are immutable? Concept and power to reason, together with the logical apportioning of the factors determined by diverse problems, is the basis of building. Here it is that the trained and specialised mind comes into action. Of what value are the bricks, stones, iron beams and concrete rafts to the man who remains inarticulate, and incapable of creating?

In the encouragement of architectural training it is essential that renewed attention should be given to the appreciation of the conditions of modern life. Following the custom of the French, students should be taken by their professors to great modern buildings, there to observe the mysteries and working in being. They should examine a railway station, note the crowds to be accommodated, the volume of traffic and goods arriving by rail, the offices and business arrangements, the conveniences, the roads for vehicular traffic ancillary to the railway tracks, the thousand-and-one details. They should inspect the Parliament Houses, the cathedrals, the public offices and Government departments, the clubs, the staging of an opera as well as the design of the auditorium, the shopping centres, life in hotels, flats, and private houses. What does a measured drawing teach other than the scenic arrangement of doors and windows, with perhaps the application of column or pilaster? What can be gained by laboriously measuring the bay of a cathedral if the ulterior purpose of the building is ignored?

In France a more academic system pertains. In the first place, there is the tradition of the Grand Prix, with its almost unbroken succession of monumental planning; and secondly, a more humanistic attitude to the requirements of the populace, and greater collaboration between architects, engineers, painters, sculptors, writers and politicians. The politician is included, for his influence is all-important in ensuring the smooth running of the educational machinery. In France architecture is just as much a part of the national outlook as literature. Both expressions are understood by all classes in varying degree, and a certain momentum to practice is ensured irrespective of local custom, fashion and prejudice. The Frenchman, notwithstanding his temperament and passion for display in the elevations of his building, is gifted with a rare and logical discernment towards the comfort and convenience of the public.

and this applies equally to the arrangement of streets and their furnishing as it does to the planning of public buildings. The planning becomes a scientific obsession; it is treated as a metaphysical problem because it is recognised that a correct solution will influence the minds and lives of countless numbers who in future will frequent the courts, halls and chambers which have been arranged, by the controlling mind, for their use and enjoyment.

It must be constantly borne in mind that the mechanic side is subordinate to the theory of conception. The architect trained to consider problems in this way is able to approach the subject in hand with a defined perspective of the conditions. He assumes an air of disinterested attachment to the facts of the programme, which he has marshalled in battle formation. When, and how, the conception is born cannot be determined; sometimes it appears unannounced, and at others it is the result of ceaseless labour and the discarding of scheme after scheme. Knowledge of what has been done before, acquaintance with precedents, and an ever-present view of the programme gives confidence; but it is always the same for master and tyro; both have to labour for results. A plan studied and wrought for on the lines given is a scientific work of art. While he works the designer is considering the relation of part to part and the harmonious patterning of the whole; he visualises in mental perspective the vertical aspects of his plan formation. The two attributes are one and indivisible. It can be argued with some certitude that recent French architecture is not distinguished for elevational treatment; and this in a degree is true, for although academic planning has been brought to a high pitch of development, the scholarship that formerly attended the vertical and outward character of French architecture during the eighteenth and nineteenth centuries and on to so recent a period as 1884, with the exception of the works of MM. Pascal and N  not, does not appear convincing. Having conceived a suitable plan formation, and achieving a solution capable of giving the best results of perspective, as well as convenience for the circulation of internal traffic, the Frenchman next approaches the problem of scientific construction, for he has arrived at the stage when there is something to construct. Then he gives orders for the battalions of materials, the dumps of steel, concrete and masonry, the miles of drains, electric wiring, joinery and other finishings, to move to their stations and do their part. Then he applies his theorem of mechanics, of acoustics, to the parts of his design to test the shaping and prove his graphic display.

It is all a question of commonsense and logical reasoning. What is true of French practice applies with equal meaning to the astonishing development of architecture on the grand scale in America: with this reservation, the American scientists have a more subtle regard for character, and their astute scholarship in working on the larger European tradition has

brought them to the right road. The Americans in their adherence to the policy of studying precedent for external and internal character have demonstrated two things—the first being that the underlying system of composition, at all periods, has never varied; and the second, the immediate necessity for augmenting the local Colonial tradition by drawing upon historical models. The Americans on this account are not plagiarists, they are scientists, with all the system of the Germans, but free from the doctrine of the *Pickelhauben*.

As we are here to discuss methods of encouraging young architects to study the higher and specialised branches of building, mention must be made of the principles of study advocated by Sir Joshua Reynolds for the guidance of painters; they apply with equal force to architects and building.

Reynolds spent three years in Italy observing and reasoning over all the minutiae which go to the building up of a picture, and returned to England an accomplished master in picture-painting. He began by analysis and ended by synthesis; his learning was profound, and he had the confidence to know that precedents are a stimulus to invention. His methods were not acceptable to everybody, for the reason that few took the trouble to understand him. There is the memorable instance of Hone's picture of 1775, entitled "*Pictorial Conjuror displaying the whole Art of Optical Delusion*." In this satire Hone represented a figure supposed to be of Reynolds as an aged man, with a wand in his hand, and a child leaning against his knee performing incantations, by which a number of prints and sketches from which Reynolds had, as it was intended to insinuate, plagiarised, were made to float in the air round his head. Among the lectures of Professor Cockerell given at the Royal Academy,* the following lines occur which have distinct bearing on our discussion this afternoon:—

No man ever invented an order or a series of mouldings. These he accepts from the greatest and most reputed masters who have preceded him; he stores books, designs and portfolios, and prides himself, like the lawyer, on his precedents and authorities. Absolute invention he never proposes to himself for a moment, but by an enlarged study of history and examples he is enabled to detect the petty prejudices of schools, to emancipate himself from the trammels of nationality and fashions, and to regard the works of all times and countries as subject to his use in so far as they may be conformable to strength, convenience and beauty.

The name of Professor Cockerell is one of the brightest among the nineteenth-century designers, for he was a constructor of consummate skill, and an architect with an international reputation for scholarship. Had he secured a larger following his influence would have been very great during the past fifty years, and English building would have been consistently improved.

While entirely in agreement with the ideas ad-

* The loan of the original manuscripts has been accorded to me by the kindness of Mrs. Frederick Cockerell.—A.E.R.

vanced at the last conference regarding the application of scientific knowledge of buildings, it is not possible to concur entirely with the idea that this theory has altogether been ignored in the past. There is doubtless room for great improvement, but it must not be at the expense of the larger issue of design.

If there is a branch of training that needs revision in addition to the mechanical side it is the one embracing the investigation of history. Whether the time is mature in this country for the consideration of one general style—a policy encouraged in France—is a matter for discussion. But it is obvious that existing methods of teaching architectural history, by treating the phases as phenomena, are wrong. The investigation of history as an aid to accomplishment in the practice of building should proceed on the lines of adaptation to modern needs. The family likeness of all buildings evolved during the past three thousand years should be brought to the notice of the student. Marked developments, such as the Classic of Greece and Rome, the idylls of the Renaissance and the modern Classic of Europe and America, should receive fuller attention than they do at present. This is essential if we are to advance either in construction or design; and just as the parallels of the classics in literature offer consolation to us in these times, so the buildings of the past can be referred to to inspire confidence for the future. Evolution is the only true theory that can be followed and its manifestations studied with advantage. We also desire to reach the ideal by the shortest road and the least fatigue; some expect a new type of design to arise out of materials; they convince themselves that time-honoured methods are out of sympathy with the high pressure of modern life, and overlook the chief factor in their dream, which is that the ideal is only attained by climbing the steps of generalised ideas.

Construction in these days is really simpler than it was in the past. We can dare more, build lighter, span greater openings and perform divers tricks of conjuring; but such performances do not prepare the way for our reception in good society. Neither will our audience applaud such actions if these antics are not part of a pithy plot. The Romans were the great constructors of the antique world, but their buildings in conception are unique, and they took care to present them decently. The skeleton of the human frame is not a beautiful thing, but the vigorous body in full development is, and Mother Nature wisely guards against incongruities by providing cartilage for ornament. The simpler the construction the greater the realisation of the idea; and whereas construction is variable, concept is always constant.

One outstanding fact remains to be discussed, and that is the promotion of healthy competition between the individual students of recognised schools, and friendly rivalry encouraged between every university and training college where building is studied, either through the agency of monthly competitions and

exhibitions, or public criticism of the works on exhibition by the eminent men of the profession. Another suggestion is that the drawings made by a student for the Prix de Rome or any of the Institute prizes, in the event of their receiving an award, should become the property of the Institute or the university, and should be accessible to every student for reference. In our appreciation of the concrete side of tradition, the importance of a tradition based on unexecuted work is apt to be overlooked. Yet this is just as much a guide to national progress as work actually carried into being. The value of the paper tradition in France is continually asserted, for the authors of the Grand Prix designs invariably incorporate unique features of their prize schemes into the buildings they are commissioned to design in later life. Evidence of this procedure is to be seen in Monsieur Nénot's amphitheatre in the Sorbonne, which is noted for its D-shaped plan. My remarks at the previous conference aimed at drawing attention to lines of general policy, and there is no need for me to recount them. In conclusion, gentlemen, perhaps it will not be inopportune for you to glance at the monograph of the New Pennsylvania Railway Station, which is familiar, but which illustrates my points more effectively than lengthy arguments. Here will be seen that combination of science and art in which the engineer humbly performs his part and interprets the Piranesian rhetoric of the chief builder.

PROFESSOR BERESFORD PITE [F.]: I am sorry to say I feel that we are in a mass of generalisation and theory, which is possibly interesting, but I doubt if it is practical or educative. The flood-gate seems to have been opened, and floods are pouring through the gate pretty freely, and are rapidly drowning us, one after the other. But if we come to the real thing, and ask ourselves stray questions as to the educational programme, either that we are practising or believing in, it will be very difficult to derive very much from either the Chairman's address or Mr. Richardson's. Frankly, I do not so much want to be critical as to be practical. At the present moment architectural education is run with a constructive side and with an artistic side. This is mainly through the syllabus of the Board of Education and the educational scheme of the R.I.B.A. It is easy to rave at it, for it is hopelessly bad in theory. The construction and the art of the subject ought never to be separated. But, as a matter of fact, I think I am right in saying that there are no books that deal with these subjects as a unity. There is an abundance of books which deal with construction and which make the learning of construction simple, from the earliest to the advanced stage, and which follow the art of the builder and the art of the engineer progressively. There are a number of books also which deal with the external aspects of buildings, ancient and modern, which are themselves interesting and important. And it is with these two sources of supply that the teacher

has to work. These books provide the text-books for the elementary and technical classes, they provide the text-books for the elementary art classes, and for the architect's office book-case. It is with the material of these works that the work of education is done. You cannot get away from that simple fact.

When you have to teach youngsters or to learn yourself how to build in these days, you find you have to deal with the building owner; and in spite of all the ornamental language as to "concepts," he is the fact. Whether he wants miles or acres of this or that, he is the commonplace individual. He may be a parson, or a town-clerk, or one of those very hard-headed "business men" who know very much better than you do what they want. It is your duty in life, without erecting yourself upon a pedestal as a demi-god or prophet, to translate into the terms of the builder the requirements of your client. If you do that as ordered you are doing your work. And let me remind you that that is the work for which you are paid, and for nothing else: you are paid five per cent. for that. This right to charge is at the root of the Registration problem.

Where does the architect come in? He comes in as a gracious element who does something for nothing; he supplies the art, and the supplying of this art is, of course, his speciality. And it is the supply of this art which is the thing that, frankly, you and I are very anxious about. Our membership of the Institute, our five per cent. is one thing: but the thing that brings us together this afternoon is not a matter of five per cent., or anything of the kind: our mutual point of contact is that which we have to supply, through the builder to his client, an element which is common in our hope and ideal and desire, the element that we call our art.

That being so, let us look at it. What is it? Where does it come from? What does it mean? It is a gift of God, because some have it, and some have not. Some of the best-toned souls one knows in the world are perfectly hopeless in the matter of artistic appreciation and of the understanding with which one starts. This is less true in architecture than it is in sculpture, or in painting: but still, it is there. The possession of the Divine afflatus, or inflatus, or inspiration, whatever it is, is the indescribable something which knits us together. It is that which filled the soul of the youngster with enthusiasm for the work of Norman Shaw: we knew nothing about his construction, or the masterly way in which he handled his clients, but we were charmed by the inexpressible art of his designs. And it is the same always; it was also the same with Street.

We deal only with the art of the past, and in a wonderful way are in connection with all buildings; our real problem is its encouragement, its strengthening, recognition and training, so that it gets a proper sphere. I do not think myself that it can be induced by education: it may be educed by education, but it cannot be induced by it. And, of course, where it is,

you open to it: it responds to you, and you respond to it. You take the student by the hand—or the student takes you by the hand, and there is found a unity of judgment which is perfectly amazing: it is a responsiveness of intellect which some have, and some have not, which is wonderful, as we move along together. Construction, plan, historical character are there all the while, but upon, in, and through all is this indefinable artistic magnetism. And yet it is something more than that, for this fluid intellectual current makes the difference between a man who is a real and the man who is a sham architect, between the man who is an artist and the man who is not. Beyond and behind that I do not know how to go; but we recognise it, enjoy it, and are helped by it, for there it is.

Of course, this indefinite consciousness of art is not the end of the matter, but it seems to me its current began to be recognised first in the time of the Renaissance, and we are children of the Renaissance in that we, in using this eclectic sympathy, have made a profession of it. Behind the Renaissance in the Middle Age everything is infused with it. I am unconscious of being able to go through the group of churches in England and saying, "This man was a good artist, that man was a good architect, or that man was a bad designer," or similarly with the Greek world. I am inclined to suggest to Mr. Richardson that his view of Roman architecture is one which will not bear much analysis. The Roman looked upon the world in a different way, and the man who unhesitatingly appreciates the architect of the Colosseum is a man who does not know what he is talking about. The engineering qualities of that building are of the highest appeal, but the architectural qualities are very poor. In the Mediæval world, or in the Byzantine world, or in the Greek, there is a universal artistic appeal. One is conscious that one's sympathy is attracted to every phase of it, though if you analyse it you find it very difficult to ascertain what this attraction is.

I must stop talking, or I shall be getting out of my depth, and out of breath too. The sympathy one has with Nature, the effect that ruin has upon one's mind, the accidents of time and history: all these things began to enter into the poetry of the artistic effect, and it is exceedingly difficult to think oneself out of one's own age. We are the children of the Renaissance looking back into an age out of which everything appears to us to be beautiful and powerful and fresh.

Now, in conclusion, I will only venture to make this suggestion. I think the first practical effort should be to bring our building construction books and our architectural history books together. And to bring the studies together, to bring the teachers together, and to make one teacher teach both subjects as the same. It is deplorable to see the teaching instruction books still dealing with the wooden roof as if the truss system was not invented by the

Romans : to make it historical would be much more interesting than the dry way in which it is dealt with. Deal with walling in the same way, so that the builder is infused with the history of the subject. The Institute Board of Education ought to secure this reform. The policy of the Institute Board of Education will be revised as soon as the war is over—the scheme was approved by the Council before the war broke out—then we hope that a co-ordination of examiners and subjects will be carried very much further than it ever has been, so that the constructional and the design examinations are practically one.

But I must apologise for having worried you at such length, and yet to come to such an imperfect, halting conclusion, but I hope we may combine our instruction and our design in one set of books, studies and examinations, instead of two.

PROFESSOR F. M. SIMPSON [F.] : I am sorry I was unable to be here at the last Conference. In the letter I received from the Secretary, asking me to take part in that Conference, I was told that what were wanted were concrete suggestions, and, as far as possible, I arranged what I intended saying last time on those lines. I shall now modify that somewhat, because it would, in many cases, be merely going over again the ground that was covered a fortnight ago.

I was very glad indeed to hear that insistence was then laid on scientific—or what is sometimes called engineering—construction. A hundred years ago all construction was architectural. The engineer came in with iron and steel ; and owing to the changes in construction—well known to all of you—during the last thirty years or so he has more and more been getting his “ mailed fist ” into the vitals of an architect’s practice. I am given to understand that among a certain class of clients—those who build the big offices in the City, for instance—the idea is growing up that an architect is a sort of decorator, a person who clothes with stone or some inferior material the construction of the engineer. If it is true that idea exists I think the sooner it is nipped in the bud the better. The question is how this can be done. The engineering profession, I think all of us will admit, is very much better organised than our profession, and there is no doubt whatever that the training of an engineering student is very thorough.

The remedy, I think, is that our students should have the same comprehensive, systematic, scientific training in this important branch of their work that engineering students receive. And that training ought to be given in a thoroughly equipped laboratory, so that theory and practical tests can go side by side, exactly in the same way as is now the case with engineering students. I do not think it is necessary to carry that training quite as far as an engineering student carries it, and for this reason : an engineer has to deal with most complicated matters of construction, such as huge steel bridges, etc. But what I do think is that the training of architectural students in this branch

ought to proceed sufficiently far to cover all construction of ordinary buildings, because that is our business. Our business is to build. I think, therefore, that a knowledge of steel structures and the elementary forms of reinforced concrete is as necessary for the architectural student of to-day as a knowledge of ordinary brickwork and carpentry was in the days when I was a pupil.

With regard to design, a subject which apparently was discussed freely last time—and Mr. Richardson has alluded to it again to-day—as I understand it, there are practically two main roads along which teaching in design can proceed. There is, first, what may be termed the traditional or vernacular ; the other is the elemental. It was building construction combined with tradition that produced the delightful work of the seventeenth and eighteenth centuries in this country. No country in the world that I know of is so rich in medium-sized buildings of these periods as England. The policy followed for the last thirty years by most architects has been by a study of these old buildings to try and pick up the threads of tradition which were broken by the Gothic Revival of the last century. Personally, I sincerely hope that this study will never be dropped, nor this road neglected.

Elemental design deals with first principles ; with massing, grouping, chiaroscuro ; and leads up to problems in composition on a grand scale. It is this elemental design which is chiefly followed in France and America, though for different reasons. In America there are no traditions. In France the traditions have never been broken ; they have existed for the last 250 years : in fact, ever since the *École des Beaux-Arts* was instituted. Take one small instance, window design. Window design in modern French work is practically the same now as you find it in Gabriel’s *Petit Trianon* at Versailles of the end of the eighteenth century, and in François Mansard’s portion of the *Chateau of Blois* of the first half of the seventeenth century. There is no need for special direction to old work in France, or for the conscious inclusion of a study of it in the schools. The French have tradition in their blood.

In England it is different, and I think the two roads of design should go hand-in-hand, side by side together in any scheme of preliminary training. Both are valuable. The attention of students should be directed to both in the early stages. I do not believe in forcing a student along any one road, and one road alone. When he has passed through his preliminary training, then, according to his inclinations, ability, and prospects, he can choose which road he will elect to follow. The chief aim in all teaching, as I understand it, is to teach a man to think for himself. If you can do that, I think you have done all that can be expected of you at the beginning. Point out the different roads to him, and he can then be left to choose for himself what he thinks best.

Elemental design can, of course, be carried very

much further than what I have called the vernacular or traditional; and I gather from what the Chairman said that Mr. Atkinson referred to this last time; while Mr. Richardson also alluded to it in his remarks to-day. The existing schools can deal with both, with the elemental and with the vernacular, up to a certain point. But I think we want higher schools to carry both—especially the elemental—still further. The Beaux-Arts, in Paris, is such a school; and in Columbia University, New York, there is another. The Columbia University School was reorganised about ten years ago, and I will read you a short extract from a paper written by Professor Hamlin, and published in the *Columbia University Quarterly*, of June 1906. In it he describes the changes which were taking place, but I shall deal, in this reading, solely with those referring to advanced design work done in the studios.

"The University maintains three studios, two of these down-town and the third in Havemeyer Hall (the University building where the School of Architecture is). These studios have each a director and an associate director or assistant. Mr. Charles F. McKim assumes the directorship of one of these rooms and Mr. Thomas Hastings of another. Mr. W. A. Delano directs the one at Havemeyer Hall. Students of the three rooms are thus brought directly into contact with three architects of experience and distinction, two of them standing in the foremost ranks of the profession. . . . The preparation of the entire schedule of the work in design, the formulation of the programmes for the different problems, and the arrangement of all the administrative details of the work are handled by a sub-committee representing each of the three ateliers or draughting rooms. The preliminary sketches for the designs are all made on certain fixed days at the University. The designs are worked out in the several draughting rooms under the various instructors, and are all handed in upon a fixed day and hour to an attendant in Havemeyer Hall. At another fixed date these designs, having been properly mounted on stretchers and hung on the walls of the Model House for exhibition, are judged by a jury consisting of representatives of each atelier and two or three practising architects chosen from a special annual jury list. The jury awards 'passes,' 'mentions,' and 'special mentions.'"

I am not certain whether this is the kind of scheme Mr. Atkinson proposed. It is, of course, to some extent, modelled on the *École des Beaux-Arts* at Paris, though it departs from it in some respects. The advantages of this scheme can be summarised as follows:—

1. There is one central control; and this control includes the leading architects of New York, who change from time to time.

2. Each student can choose his own studio and visitor.

3. The visitors change; there is no danger of their becoming fossilised.

4. The work in all three studios is judged together.

5. Students see how students shape in other studios.

If some such scheme as this were adopted in London, there is no particular reason why the number of studios should be limited; there might be three, or half a dozen, or as many as found advisable. The main great advantage of the scheme as a whole is that both teachers and students are brought together. The result of this communion must tend to bring architectural design into line; to ensure progression in the same direction; and eventually to produce that harmony of architectural expression, so lacking in the work of the last century, which is absolutely essential if our art is to make real and substantial advance.

Now just a few suggestions, which I will merely mention, but not argue, on some main general points in connection with architectural education. It is now about ten years since the Board of Architectural Education recommended training in a school, but left that training optional. I suggest that the time has come when it should be made compulsory; that a notice might be issued now to say that at the end of three or five years—a period which would depend on circumstances—a year or more must be spent by all students in an architectural school before presenting themselves for the Final Examination of the Institute. The suggestion of three or five years follows the precedent set by the Institute itself when it abolished its voluntary examinations and made the examinations compulsory.

If that suggestion be adopted, the Intermediate Examination could be abolished. The principle is already admitted, inasmuch as partial abolition already exists in the exemptions which are granted to students in a school who obtain a First-class Certificate. This change would not entail the abolition of the Student stage. The Preliminary Examination, as you all know, has been abolished, but the Probationer stage exists; and the Student stage would also remain, but would be reached by education, not by examination: in my opinion a far more satisfactory method. Of course, some safeguards would be necessary. The number of external examiners would have to be increased, and there would have to be cohesion between these examiners to a very much greater extent than exists at present. Possibly the external examiners might form a sub-committee of the Board of Architectural Education.

My last suggestion is that the heads of the recognised schools might meet annually to discuss details of curricula and other matters and report to the Board of Architectural Education—somewhat on the lines of the Headmasters' Conference, which, I think, meets once a year and reports to the Board of Education. Possibly, also, if some such meetings were instituted, the teachers of architecture in the schools of art throughout the country might also be invited

to attend. I was for two or three years one of the three examiners in the National Competition which is held every year. One thing which struck us strongly then was how wrong in many instances was the direction given to students in these schools. It would, I think, be a good thing if their teachers—some of them architects, some not architects—could be brought into touch with the heads of the different recognised schools. These matters, of course, are more for the Board of Architectural Education and for the Council of the Institute than for this Conference, so I do not argue them at length. I have merely brought them forward, following the request made to me by the Secretary, as concrete suggestions for discussion.

MR. A. R. JEMMETT [F.] : From one point of view this discussion on education is perhaps premature, as we have not yet decided exactly what an architect is and what his functions are; consequently we cannot decide what it is we want to teach him.

The whole subject divides itself into two—what you want to teach and how you are going to do it. What you want to teach ought to come first, the method whereby you teach or the arrangement of schools can come afterwards.

As Professor Lethaby points out, the great thing is to concentrate on what we agree upon and so try to make progress. On the subject of what we want to teach there has been no agreement arrived at yet. There is a marked difference of opinion between, for instance, Professor Lethaby and Professor Adshead. Professor Lethaby seems to want to concentrate on structural perfection as the end and aim of architecture and to limit our training to the sciences necessary for that purpose; but this would not fulfil the programme put forward by many other speakers. I have great sympathy with Professor Lethaby's point of view. I think it has been of immense value to the progress of architecture during the last fifty years as a standing protest against the chaos that followed the Gothic Revival, but I find it difficult to accept its limitations.

Structural perfection as an end in itself seems to be the aim of the builder or craftsman rather than that of the architect in the widest sense of the term. Indeed, if Professor Lethaby wished to reform the education of the builder or the craftsman, what else would he say to them? Apart from the fact that this structural theory does not help us much in the designing of monuments that serve no practical purpose and entirely ignores the architect's skill as distinct from his knowledge, it seems to leave out the one essential thing—the arrangement of structures to express ideas.

It might help to clear our minds on this point if we analyse the effect produced on us by objects that please and endeavour to discriminate between those which raise vague or indefinite emotions and those which suggest precise or definite ideas. The works of Nature raise vague ideas or emotions. Look at the

sky or the sea, at a tree or a flower, and we are pleased. But no definite ideas are put before our minds; on the contrary, our minds read their own ideas into the scene. An instance is afforded by the familiar song, "What are the wild waves saying?" They are saying anything we choose to imagine they are saying, while as a matter of fact they are, of course, saying nothing. I am inclined to think that on the lines of Professor Lethaby's structural theory we can obtain structures which appeal to us in the same pleasurable but vague way as do the works of Nature, but I do not see how this theory can help us to produce works that express definite ideas or transmit definite emotions. It is possible to produce structures of perfect beauty but without precise meaning—saying nothing definite because they have nothing definite to say. It is also possible to produce other structures which, in addition to the indefinite appeal of the beauty of their perfection of structure, have the additional charm and power of conveying or expressing definite ideas. I think it important to bear this distinction in mind, as in my view works of architecture have this added power and charm. Perfect structure or craftsmanship does not appear to be complete architecture until it has been arranged or grouped to express ideas. A structural theory ignoring this point seems to limit the possibilities of architecture. Structural science may teach us how to build, but it will not teach us where to put our buildings, how to arrange and lay out the buildings of a university or a hospital to express its purpose or the public sentiment that seeks expression in the building. It may teach us how to construct perfect chairs and tables, but it will not teach us how to arrange them in a room to express or symbolise the idea lying behind the purpose of a meeting. It may tell us how to construct such a feature as the Piazza of St. Peter's, but it will not tell us when and where such a feature should be constructed.

The arrangement or the planning seems the important thing. We need a theory teaching us how, having got our perfect scientific structures, we may so handle them or arrange them as to express ideas; a theory of architectural expression as distinct from a theory of construction. Such a theory exists at the *École des Beaux-Arts*, where there is a Professor of Theory, and until we reach some such theory here, including the art or science of architectural composition, we shall not get much further with our education.

I am disposed to think that the situation here as regards architecture is much the same as it would be in regard to music if the theory of music had been entirely lost, while gifted persons continued to improvise or copy the works of the musicians of the past; sounds might be produced pleasing to the amateur but objects of indifference or of ridicule to the theoretical musician.

Seeing the need of some theory or generally agreed method by which to express ideas in terms of architecture, I am hoping to persuade Prof. Lethaby and those

who think with him to advance along the lines of such a theory provided it is scientific, precise and logical. I think if Professor Lethaby will add to his structural science the science necessary to this theory—such as the science of aesthetics, of psychology, of human nature—that others would perhaps agree to keep their activities within its limits. It was my hope in intervening to get things a step further in this direction.

I have already spoken too long on what I consider we want to teach—viz., the theory of architecture. On the question of how we should teach I will only say that to my mind all teaching should be subordinate to, dependent upon, and inspired by this theory—a theory in which such subjects as science and history find their natural subordinate places. I would simply add that we have to remember that the principal aim of the architect is to acquire skill in design, and that the sole object of acquiring scientific knowledge is for the purpose of making him a better designer or of enabling him to carry out his designs. Beyond this it has no value whatever.

As I said before, I have a great appreciation of Prof. Lethaby's theory of the scientific structural perfection of building. It so nearly satisfies the whole of one's mind that for that very reason I feel it is dangerous and misleading. It seems to leave out the one essential thing that distinguishes architecture from engineering or building—the one thing which the architect can do and which no one else can do. Others can build, but the only person who can design is the architect. He arranges structures to serve their purpose and to express ideas; if he does not do it no one else will. This seems to be the one thing that will justify his existence in the future and therefore the essential thing to teach.

MR. H. KEMPTON DYSON: From the report of the first of these informal discussions I see that Professor Lethaby was their originator. For many years I have studied the remarks of Professor Lethaby, who represents a definite school of architectural thought. If his ideals were followed in architectural education I believe we should no longer feel that architecture was not occupying its proper place in modern civilisation. He has for long urged architects to study the art and science of building and to be sure of the fitness before expressing themselves in the mannerisms of the past. I am glad that he asked us to look upon "architecture as primarily the art of building cities," because the man who merely calls on us to abandon our ways and live the "simple life"—the life of uncivilised man—is not likely to be asked to co-operate with the commercial world in coping with the practical difficulties met with in the progress of modern civilisation.

The cry is that the engineer and the surveyor are usurping the place of the architect. Two favourite apophthegms of the engineer are, to quote the Prince Consort of Queen Victoria, who is reported to have

said, "If I wish to talk about a thing I send for an architect, if I wish to get it done I send for an engineer"; and the American who said that "An engineer is a man who can do for one dollar what any fool can do for five." These remarks express two common ideas among the ignorant public—namely, that an engineer is superior to an architect because he does what is wanted and he does it cheaper. Now that ought not to be. Personally, though a consulting engineer, I hold that the engineer in building work is not, and never can be, entirely sufficient by himself. The work requires to be organised and controlled by an architect if it is to be completely efficient.

It is quite a common idea that the employment of an architect is in the nature of a luxury—that he will cost you more and incur large extras. To what has the country been led by the misunderstanding of the qualifications of the architectural profession by our Government Departments? I have no hesitation in saying that the result has been the loss of millions of pounds sterling and the prolongation of the war. The amateur and the quack have rushed in, and contractors have been given practically *carte blanche* in building operations, with the result that inefficient buildings have been erected, material wasted, labour allowed to get out of hand and the completion of urgently needed structures for war purposes seriously delayed by months. The architectural profession has been pushed on one side to make way for a crop of self-styled factory specialist designers who are in many cases incompetent. Some firms who seek to furnish constructional schemes to architects advertise to provide factory owners with complete designs without the intervention of an architect, and employ architectural draughtsmen with that object. The architectural profession might with advantage protect itself as the medical profession has done against the quack. It should ostracise those trade firms of so-called constructional specialists in steel and reinforced concrete and the contractors who deal direct with clients without the intervention of an architect, whereby the interests of the building owner are not protected. Selection on price alone results in inefficiency. Architects should only co-operate with other professional men, such as engineers, and not become associated with contractors and other commercial firms as they do when they accept schemes from them. Strict professional etiquette in co-operation with the engineering, surveying and other professions would bring its own reward.

The education of the architect in the past has been lacking in that it has not made of him a scientific man. The student has not been made to appreciate the fact that he need be none the worse an artist because he has a knowledge of the many branches of science that are required by an engineer, for example, to achieve success—namely, mathematics, chemistry, physics, mechanics, business economics, ethics. Scientific training will make him precise, systematic, able to analyse and synthesise. The architectural student

should be taught to be a business man. The ideal to strive for is that architecture should be so expert a profession that a layman would no more dare to interfere with the work of the architect than with the work of the engineer. It should be impossible to get an efficient building so economically from anyone as from an architect.

Greater attention should be given to the study of details of professional practice. Why does this Institute so seldom have papers read on experiences in everyday professional practice? What the younger men ought to be told are the business methods of the successful architect. The comparison of experience would be of value to all, even to the successful practitioner.

Building construction has not been taught properly. The teacher should begin with a course in science—mathematics, chemistry, physics, mechanics, properties and manufacture of materials—and then show how the various details have arisen by the application of the fundamental principles in the endeavour to fulfil the function. The reason, or lack of reasons, that led to the variant forms of the detail under examination and the differences in building practice of various countries should be contrasted. Such instruction would show clearly when and where alteration in standard forms should be made. Invention in building construction should be encouraged.

The word "Art" is used in more senses than one. By "Art with a capital A" is often meant aesthetics—a science; in that sense we could speak of the Science of Art. Why not have Art studied both as a science and an art (with a small a)? That is to say, why not study it in theory and in practice? The theory has been too much neglected, with the result that architects too often lack originality. With all who are engaged in the creative professions, such as architecture and engineering, imagination and inventiveness should be trained and encouraged.

MR. ROBERT W. S. WEIR read extracts from a Paper he had prepared which is here given in full:—

I take it that architectural education has been selected as one of the subjects for discussion at these conferences because it is generally agreed that there is something radically wrong with the present system of training. This subject of architectural training created a good deal of controversy some twenty-five or twenty-six years ago, and I really think we have not got much "forrarder" since then, in spite of all the schemes that have been initiated and put into practice in the interval. Looking over my bookshelves a few days ago I happened to come across two volumes whose existence I had almost forgotten; in fact, I may say that their existence seems to have been generally forgotten. But the subject-matter contained in both is as apposite to-day as it was when it was originally written, and I recommend them to the careful study of all who have at heart the real advancement of architecture as a living art.

The one is entitled "Six Essays by John T. Emmett," and is dated 1891. It consists of a reprint of articles from the *Quarterly* and the *British Quarterly Reviews*, written at intervals between 1872 and 1881. The names of the first four are:—"The State of English Architecture," "The Hope of English Architecture," "The Profession of an Architect," "The Bane of English Architecture." The other volume is called: "Architecture a Profession or an Art: Thirteen Short Essays on the Qualifications and Training of Architects." Edited by R. Norman Shaw, R.A., and T. G. Jackson, A.R.A., and it bears the date 1892. The first I have only had time to glance at again; the second I have looked over a little more carefully, in order to somewhat revive my memory as to what the old controversy was all about, and I find that we were then just about where we still are to-day in most that pertains to the subject before us.

The controversy raged primarily round the question of registration of architects, and naturally a good deal was said and written on the subject of architectural education. A Bill had been introduced into Parliament for the purpose of making architecture a close profession. A protest against this proposal, signed by a large number of architects and others, had been presented to the President of the Council of this Institute, and a copy of it had been forwarded to and published in the *Times*, with a covering letter signed by four eminent architects—Norman Shaw, Jackson, Sedding and Arthur Blomfield; and by two equally eminent painters—Alma Tadema and Burne-Jones. Further, seven of the younger architects, signatories to the protest and members of this Institute, had resigned their membership—R. Blomfield, Horsley, May, Macartney, Newton, Prior and F. M. Simpson—all well known to-day, and I am glad to say still amongst us.

Some ten or eleven years ago (to be precise, in 1906) these men were all induced to come back into the fold, and they brought in with them others of the protestants, of whom the most prominent of the then younger men was the member at whose suggestion these conferences are being held here now.

The Parliamentary Bill was, however, really a mere detail. The controversy mainly hinged round the question of making architects by examination. The Institute had, as a matter of fact, opposed the Bill, as Mr. Jackson pointed out in his introduction (p. xxx.):—"Under another name the Institute has a registration scheme of its own with which the Bill would have interfered seriously, if not fatally. It has within a few years established a series of examinations which must be passed by all who wish to become members of the Institute; and as it is the constantly avowed desire of that body to make itself co-extensive with the profession by sweeping all architects into its net, it is obvious that it aims at securing for itself that monopoly of examination and diploma which the Bill sought to confer on others." Much of what he says has now happened. Registra-

tion is, or was before the war, I understand, a great and burning question of politics in the Body.

This subject, however, I will not enlarge on. What I am principally concerned with is the fact that, in spite of all that has happened, in spite of the influx of the large body of protestants, examination appears to be more firmly established than ever. Blomfield has been your President, Newton is now, Lethaby is an active member, but what impression have they made on this question. Are they now agreed that it is the best way, perhaps to them the only way; if not, why did they not strenuously set out to alter the system radically?

The other day I asked a friend, who is one of the examiners, and who himself passed in by examination about the time of the great controversy, whether the examinations went on much on the old lines. Yes, he replied, but they are much stiffer.

These essays of twenty-five years ago argued against the *principle* of examination. The following are a few quotations from various essays in the book by different authors, now all members of the Institute:—

Blomfield :

(1) "The Institute examination as a means for the advancement of architecture is a farce and a sham."

(2) *Again :* "I have heard architects, whose experience entitles them to speak, say distinctly that this examination does not qualify young men to be competent assistants, much less competent architects."

Lethaby :

(3) "The so-called training of architects at the present time consists not in being taught their art, but in learning more or less by rote out of books some facts about it *when their art was an art*."

(4) *Again :* "When the arts of building are all of them killed out finally, and the memory of their doing dead, who shall build them up again. Will being examined in architectural history, practising a mechanical system of drawing and acquiring the completest equipment of all the routine of the profession give back to us the skill and delight of the craftsmen."

I could quote many others did time permit.

And now we come to the point that I have been endeavouring to lead up to.

To my mind practically the whole of the architectural training in this country is affected by the act that these qualifying examinations exist and that most of the young students are working with the avowed intention of trying to pass them.

This is one of the greatest faults in the present system, and until it is remedied—and it can be remedied—there seems little chance of real progress.

Sir Thomas Jackson has never wavered from the principles he laid down twenty-five years ago. The following views he expressed then are, as far as I know, still his to-day. He and Mr. Basil Champneys are, I believe, the only living representatives of that memorable company that signed the protest who are outside the Institute still.

He says (p. xxiv.) :

"It is difficult to overrate the mischief that is done to the architectural student by misleading him in his studies and making the passing of examinations his aim, instead of the acquisition of a sound knowledge of his craft. He studies not to know, but to pass; he thinks he can learn from books and drawings of things what he can only learn from things themselves; he mistakes archeology for art, and imitation for design: he is forced to push aside things he really cares for because they may not pay with the examiners, and to leave half-mastered subjects that interest him because it is time to cram up something else that is sure to be asked. These evil influences affect the teacher as well as the student. 'The highest kind of teaching,' says one great authority on education, 'which aims at formation of mind, cannot find free play for itself under a system which subordinates the teacher to the examiner. Such a system has a perpetual tendency to give a mechanical character both to the teaching and its results. Originality and freshness in the teaching is killed by the perpetual necessity of paying regard not to the subject that is to be taught, but to the examination that has to be passed.'"

It is quite possible, however, that so long as architecture maintains its present position as a *profession*, so long will examination in some shape or form continue to exist, and more so if registration becomes a *fait accompli*, which Heaven forbid.

Further, the regulation and control of such examinations are likely to remain in the keeping of this Institute, acting in collaboration with other kindred bodies, but so long will the real and efficient training of young architects be cramped and ineffective.

But there are other forces rising up, backed by a public opinion slowly but surely being enlightened on essentials.

In various large provincial cities we now find flourishing municipal schools of art and craft in which the teaching of architecture takes an honourable place in association with the crafts.

The London County Council are giving serious consideration to the question of training in architecture in association with the crafts of building. A fully equipped and wonderfully efficient school of building has been in existence for some time in South London, of which Mr. H. W. Richards is Principal and Professor Beresford Pite is Director of Architecture. A course of higher training might follow on either in connection with the universities or otherwise, and young architects passing through these schools would have the opportunity of working for a definite aim which will be attained through the merit of their work, and not by artificially set examination papers.

Already the London County Council awards its Scholarships not on the results of examination papers, but on a careful consideration of the quality of the work of the term. It was my privilege a year and a half ago to act as an adviser and report on the work

of candidates for L.C.C. Art Scholarships in this connection, and I was much impressed with the simplicity and efficiency of the system through which awards were given.

Further, school work must go on in conjunction with practical training; by this I mean training in actual contact with real work, training under a competent practising architect, who will be required to allow time off in working hours for the student to attend classes and lectures, or engage in craftwork of one form or another.

To again quote Sir Thomas Jackson (p. xxviii.) :—

“Our proper field is not confined to the office; we are, or should be, still more at home in the workshop or the building sheds; our brethren are not the lawyer and the doctor, but the craftsman and the artisan; and if the architect should choose to be his own builder or craftsman, and carry out personally the works he designed, he would but be doing what was done by his predecessors, whose handiwork we now take for our model. If architecture is ever to live again amongst us the professional idea must disappear.”

When I was very young and at the start of my training, I had to go at 8 o'clock to the old Drawing School at Edinburgh and do an hour's work before proceeding to the office. In Scottish universities the lectures begin at 8 a.m. summer and winter, and students of Law, for instance, go to lectures before office hours much as we used to do. I fancy a similar system pertains in France. Why should it not be possible here? We shall have to lead a more strenuous life, work harder and start earlier, after the war.

But what will happen to this Institute under such new external conditions. It may have to revert to its old pre-examination times position, referred to by Mr. Reginald Blomfield in one of the essays. He says :—

“The old position of the Institute was safer. It had its fine library, its Royal Charter, its considerable financial resources. It had all that was necessary to make it a centre of scholarly discussion and research on questions of architecture, and an official headquarters of reference on points of professional procedure. . . . But it has stepped outside this useful and honourable position: in its solicitude for architects, it has aimed a dangerous and insidious blow at architecture itself.”

In conclusion, I should just like to read you a further quotation from Sir Thomas Jackson (pp. 230-232) on the possibilities of the future. Some of you may perhaps call the idea verging on the Utopian; for my own part I believe in its thorough practicability and efficiency

“Imagine, for instance, some National School of Architecture, to which anyone connected with building could have access, whether he intended to be an architect, or a builder, or a craftsman in one of the arts connected with building. Let there be no conventional distinction of profession, no barriers of

etiquette to divide the students. Furnish the school with competent teachers and appliances for study in every branch of the art. Let it be possible to learn all the mystery of good construction, but let construction never be taught except in connection with design, nor design except in connection with the proper and natural use of material. Let the school be regularly visited by those who are recognised as masters of the art, to whom the paid teachers should be subordinated, and to whom the students could look for direction, advice, and correction of their taste. Let the students have every opportunity given them of seeing work actually done, and of themselves putting their hand to it. For those who have no workshops at home, which the young builders would naturally have, let there be attached to the school, workshops where the process of every handicraft could be demonstrated, where masonry, carpentry, joinery could be practically taught, and a forge where iron could be wrought. Drawing of a practical kind should, of course, be taught, so that every student might be able to set out and explain his ideas to the workmen or himself. Here those who mean to be ordinary builders might, if they please, stop. The school would, of course, be graduated, and it would not be necessary or desirable that everyone should go through the whole course of artistic training. We do not want our finer tools to do our rougher work, and we do not employ our most accomplished artists on ordinary occasions. The great thing would be that up to this point all should have been trained alike without distinction, and that the builders should have associated with those who aimed at higher flights, and should have shared in the same training under the best masters of the art. In this way we might hope to introduce into the building craft good taste, knowledge of design, restraint, and appreciation of simplicity; and with these qualifications, which would in time become traditional, we might hope for better things in the ordinary class of buildings for which no great architectural effort is needed. We might, in fact, hope to raise our ordinary street architecture to the level of that of the last century, when, without any affectation of architectural effect, the sober brickwork and graceful joinery, full of pleasant fancy and quiet imaginings, combined to make some of the most loveable homes in England. Above all, let there be no folly of certificating or labelling the student as proficient at any period of his career. Let him remain a humble learner all his life; and let the school be open to him at any future part of his history whenever he wants instruction or advice, or desires to freshen his interest by contact with younger aspirants.”

MR. H. DE COLLEVILLE [A.]: Might I suggest that before settling on any definite scheme of education it is important that the duties to be undertaken or accepted by the profession as its legitimate share of service to the community should be defined.



From my own point of view I should like to see taken up as part of our profession all professional subjects both of art and science as usually applied to controlling the builder. "If this were done all the subjects involved could receive equal consideration from the Institute, and educational bodies would arrange their teaching accordingly. This might perhaps require the Institute to be reconstituted and divided into faculties dealing with the various subjects, but I think that it should be impressed on the public that whether a man is connected with the high conception of planning or the science of structural engineering, he should be recognised as an architect. We should strive to show the public that the architectural profession is capable of exercising all the professional functions connected with building operations without recourse to outside professions and gain their respect and confidence by that method. For instance, I suggest that in the case of a scheme of national interest, such as a great bridge or other public improvement, it would be an asset if the Institute were able to furnish experts exclusively appointed from among their members, making the appointment of outside experts unnecessary. Collaboration among various architects, all experts in various branches of an intricate profession, would be in accordance with modern requirements and need not necessitate that those connected with the scientific side of the subject should be termed "engineers." We lose confidence in ourselves by the adoption of this term, while by allowing the educational side of such subjects as reinforced concrete to pass into other hands, we invite encroachment on our legitimate province of work. We have seen in connection with the present crisis that the Government have been inclined to discount the services of architects, and it is a regrettable thing that at the present moment, when so much building work is required for Government purposes, the Professional Employment Committee should have to find relief work for apparently unwanted architects, by placing them in temporary positions in other callings. If the Institute could be induced to interest itself in all the problems connected with building, including the engineering sciences which are developing on all sides, the educational bodies would be bound to reflect the views of the main body on this matter, and considerable scope could eventually be offered to young architects whose inclinations invite them to specialise in such subjects as reinforced concrete; and this would relieve congestion and thereby better the lot of those who are more gifted for planning and design, while at the same time it would shut out competition from commercial firms encroaching on professional work.

A proposition by MR. ROBERT ATKINSON [F.] that there should be a further meeting on the subject of Education, seconded by MR. PERCY B. TUBBS [F.], was put to the meeting and agreed to.

PROFESSOR LETHABY [F.], rising at the instance of the Chairman, said: To call upon me to reply is to put me into a difficult position. There is so much of the highest interest that has been said. I think we are nearing agreement: a large measure of agreement has already been expressed. I was delighted with Professor Simpson's speech, also with much in Mr. Jemmett's and Mr. Richardson's. I think Mr. Richardson calls art much that I call science. The concept that he talked about is of vast importance. Of course, we are all out after conception, but how is the conception to be reached? That is the point. It is not to be reached by wearing a tall hat, or by talking æsthetics; it is to be reached the last thing through knowledge, through analysis, and through training. I want the conception as much as Mr. Richardson does. To Mr. Jemmett I would reply very much in the same way. When one says science, he thinks one draws up so short. I do not mean the mere geometry of bisecting a straight line, or the mere mechanics of putting a cannon-ball on a lever, or the mere chemistry of building-stones, and that sort of thing; I mean the real science or real art of architecture. Geometry, for instance—we do not conceive how geometry should be applied to architecture; it should be the analysis of the geometry of what I would call cells. We should build up a real architectural science. This branch of geometry would deal with the analysis of simple chambers, the whole of the possibilities of the development of the chamber, branching out into the largest possible thing that can be dealt with—annexes, etc. And after you have had the science of architectural geometry (quite an infinite development beyond the bisecting of a straight line), in the same way you might have an architectural and structural mechanics. Beyond the geometry of the single cell or chamber, you would come to the geometry of what I call packing, the geometry of the association of the "cells"—French planning and Roman planning. It is all science, or all art; in fact, it is all the All! Because we do not use certain words which express all these things, it does not follow that we do not mean them. I am all, in the end, for emotion as well as conception. You will reach true emotion by not talking too much about it. This sham emotion of the ateliers is something which stands in the way, and when we have our training and the power it gives, a way will be open to us for our emotion.

MR. HARRY WILSON, who was asked to speak, said he would like to come to another meeting, and to say a few words, drawing attention to some practical suggestions.

THE CHAIRMAN said they would be delighted to hear Mr. Wilson, and they would put him down to open the discussion at the next meeting on the subject.

REVIEWS.

AFTERWARDS.

The Coming War. By Ambrose Poynter. 8s. Lond. 1916.
John Murray, Albemarle Street.

A man of reasonable modesty shrinks from recommending the class of education to which he was himself subjected. If discussion arises as to the comparative merits of different methods of training the young it is at least embarrassing to any man of good feeling to stand up for the particular kind of schooling which brought him to efficiency. If a man says, except in privacy or intimacy, "the best education in the world is the education which I received," he either has to save his face by alleging or pretending that he wasted his chances, or to leave his face unsaved and be written down as a boastful prig.

Mr. Ambrose Poynter has written a book which is full of interesting thought clothed in particularly neat English and adorned with just such a measure of classic allusion as can be interwoven among (rather than incrust upon) a subject that is largely statistic, largely philosophic and mainly æconomic (I spell it with a diphthong for reasons which Mr. Poynter will understand). There is no doubt whatever that Mr. Poynter's book owes its good features, which are very many, to the fact that he was educated on lines which (purely, I believe, out of courtesy and good breeding) he condemns. "The training," he says, "of the principal public schools in this country is largely founded on a system which, though it cannot be called entirely obsolete, has become ill-suited to the majority of the boys who are intended to profit by it and which tends to endow the weaker-minded ones with a snobbish view of life." In regard to this utterance, which is followed by more in the same strain, I can only say, first, that Mr. Poynter is not one of "the weaker-minded ones," and, secondly, that if I were not hampered by the same considerations of decency I should say what I think about that "best of schools" which housed and taught Mr. Poynter and attempted to teach his present reviewer.

This code of modesty has, I think, its disadvantages; for if people who have been well educated (or even well taught, which is not the same thing) are pledged by the laws of good behaviour to decry that education (or teaching) in public utterances the very adroitness and cogency of which are due to the system decried we shall be sorely hampered in the serious discussion of the relative values of the different methods of instruction prevailing in our country. Mr. Poynter, if I understand him aright, complains that he and others were made to give too much time to Latin and Greek, that he was introduced to them at too early an age, that he was taught these "dead" languages in an uninteresting way, and that his after chances in life were hampered by insufficient, or negligible, training in book-keeping, shorthand and the manipulation of the typewriter. Judging Mr. Poynter by himself, I venture to say that he very obviously made his studies

in classic language as interesting to himself as he makes them to his readers; that book-keeping is not so deep a craft that it could not be pursued by him as a by-study; and that the accomplishments of type-writing and stenography could have been mastered by him (probably have been) as easily as billiards. Universal culture in typing during school and college years would in a couple of generations practically stamp out calligraphy, which, after all, is a graceful accomplishment and reasonably useful.

All I have here said is no condemnation of Mr. Poynter; it is merely a suggestion on my part that he has written a better book than he thinks he has, and that one reason of its goodness is the education which the author, out of pure modesty, affects to blame.

"*Fas est et ab hoste doceri*"—so the advocate of modern-side education begins; "from the enemy Britain may learn much, particularly in the industrial arts of peace." Mr. Poynter is no pro-German; he permits himself to endorse George Robey's successful outburst of description, "A bloodthirsty horde of super-educated savages," but he does wish to urge upon us the necessity of imitating after the war some of those methods of pushing commerce and encouraging practical science which led the Germans during the last forty years towards a pinnacle of commercial success which but for the outbreak of the war (imposed by them upon the world) would undoubtedly have been attained.

Mr. Poynter is quite right up to a limit. England has lacked push, has lacked the power to make the most of her own inventions, and has lacked also Germany's gift for appropriating the experience and initiative of other lands. Let us, therefore, learn from Germany, by all means, but it is fair to cap Mr. Poynter's Latin tag with a Greek one,—"*Gifts from the foe are giftless, profitless.*" There are some German virtues which we should be better and happier without even if we remain, for the loss of them, a little poorer and a little more like the stupid generous old England of the nineteenth century.

In the middle of the book there are some chapters entitled "Raw Material." They deal with England's man- and woman-power. If I mention that they are particularly statistical it will be understood (quite erroneously) that they are just the kind of chapters for the writing of which Mr. Poynter's typo-stenographically trained, modern-sided student would be specially suited. It amuses me to think of such a being in connection with these pages—pages into which the author glides with a couplet of Dante and out of which he emerges tossing a nosegay of verse from Theocritus. These chapters are very good and evince that study of social or rather citizen humanity which is obtainable only by living in the past as well as in the present.

Most truly does Mr. Poynter observe that England before the war was stratified in social layers of horizontal formation across which the war has driven vertical divisions of a less artificial and more natural cleavage. Certainly this image is a little forced, for

even the war classification has its horizontal beds, and even pre-war England knew divisions in the ranks of Britannic humanity which ran counter to the laminations of wealth and social standing. But roughly and broadly the observation is true and sound. The classification of men brought about by the war ran largely at right angles to the pre-existing severances of society. Mr. Poynter's suggestions and statements on this interesting upheaval stimulate thought and his readers are led on to go further into the analysis of war's social changes. I am driven for my own part to think that one of the happinesses brought by war to our citizen-soldiers has been the discovery of the pleasure of what may be called disciplined aristocracy. England for a long time had been suffering from the grave and inherent discomforts of what the French call *égalité*. The theory that every man is as good as his neighbour is mercifully untrue. If it were true the facts that made it true would obviously be fatal to all comfort and convenience in the life of the State. England had very largely subscribed to it, with the result, among other results, that in country districts the old benign and convenient control exercised by squires and magistrates has been largely superseded by the submission of the inhabitants to the rule of boards and councils which, except in so far as these boards are composed of the *personnel* of the old rural aristocracy, means that country (and country town) affairs are governed by groups of nonentities faintly swayed into the necessary activity by the alternate energies of their radical members and of the functionary who is their paid official. As far as the actual government of the community is concerned there *may* be no harm, there may even be good, in this *régime*, but its effect on the citizens themselves is immensely depressing. There are certain pleasures in governing, there are also very great pleasures in being governed; but the lukewarm sense of governing yourself through the medium of a group of counterparts of yourself, elected by a process in which you have so infinitesimal a share that you would not give up a game of golf to take part in it, can bring no intoxication to the brain of a patriot.

With this municipal and rural tepidity of government goes hand in hand a social torpor bred of the dispiriting discovery that, if you are as good as everybody else, everyone else is as good as you; and the flaming apocalypse which has burst upon many a voluntary (or conscript) soldier as he stepped from the horizonless plateau of kingship by equality into the subservient post of a private was nothing less than the glorious felicity of being ruled with unquestioned authority at the very base of a vast pyramid of graduated oligarchy. "This," he must have said, "is life indeed. Here am I in a live and glowing system. I may rise to intermediate power in it; I may become one of those who unite the privilege of commanding with the privilege of being commanded. In the meanwhile I am relieved of all responsibility except the

glorious, restful, simple and satisfying responsibility of obedience." To do them justice, their hot-headed joy was justified, for many of them had scarcely known beforehand the pleasures of submission. For the parents of the poor have but little authority and their teachers often teach what is called "independence."

To change the subject. Mr. Poynter in a clever set of pages on the epochs of England and their vicissitude exclaims that every man belongs to his own century and that every century is at its own time "up to date." How true this is! But I want to counter it by another truth. I like to think that when Aristotle defined man as "a political animal" he did not merely mean that every baby

Born into this world alive
Is either a little Liberal
Or else a little Conservative.

Citizenship indeed implies a city, and, with all due respect for the mutability of South American communities, it more or less implies a pre-existent city. Certainly, citizenship, or political existence, counts for more in an old than in a new-born polity. I believe that happiness among thoughtful people consists very largely in the sense that they are comrades, fellow citizens, or fellow religionists, with those who have preceded them. We all, of course, live on the edge of the ages, with the precipice of futurity in front of us; and as far as food and raiment are concerned, and dividends and New Art, we are obliged to take a front seat, with our feet hanging over the cliff; but the backward view over the plateau of the past is a fine view, after all, and the people who enjoy it most, who see it clearest, and live back into it, are not always the fools.

Mr. Poynter, I realise, makes his reviewer ramble, which is only another way of saying that he makes his reader think. He doesn't forget that he is an architect, either; after his second chapter, which closes with a quotation from Fanny Burney (I admire anyone who admires Fanny), he goes for London and London's failings. He hits boldly at our unrivalled powers of producing expensive bathos in architecture and town planning, and if I feel constrained to think that he sometimes hits too hard, or with misdirection, I can at least enjoy to the full his merry onslaught upon a certain centre of West End wealth where indiscretion, ignorance and apathy have punctuated their claims by a monument.

There are so many bright spots in the book that I can only touch on those I should like to commemorate. Such are his lively passage on the modern house; the contrast he emphasises between "furious and brief effort" and long-continued energy of a less demonstrative and obvious kind; his raps at the British workman, the civil servant and the Member of Parliament, and his comments on the German discovery that there is "good business" in art. In regard to this last I am ready to think that England has already begun to awake from sleep. Undoubtedly, one of the most striking developments that our generation has

seen has been the renaissance of beautiful lettering as a trade asset and the encouragement of good drawing (and colouring) for purely advertising purposes. Commercial architecture, too, has immensely improved during the last twenty years.

Finally, I should like to argue in a friendly way with Mr. Poynter on his suggestion that traditional art died out with the death of personal magnificence; I should like to insert Alfred Stevens alongside of Josiah Wedgwood in his page on the use of art in commercial products, just to show that the nineteenth century could do something in this line; I should like to reproach him very tenderly for calling the great Perkin "Perks"; and, lastly, I should wish to thank him very heartily for two evenings of very pleasant and profitable reading.

PAUL WATERHOUSE [F.].

AN AMERICAN GUIDE TO ARCHITECTURE.

The Practical Book of Architecture. By C. Matlack Price. Sm. 40. Philadelphia and London. 1916. 25s. [J. B. Lippincott Co., 16 John Street, Adelphi.]

A casual dipper into this American book, if an architecturally superior person, is likely at first to be "antagonised" by it. He will resent the author taking "the whole world for his parish" and "putting him wise" on all things—from the Græco-Baptist church of the early colonists to the splendid piles of West Point, from the ways of the Egyptians to the personal relations of twentieth century architects and clients. But a more careful study disarms him; he finds the book is not written for initiates, either masters or pupils, but for the great public, for clients not architects. Whether it is good for the great public to be encouraged to consider mysteries is questionable; it is apt to acquire an interest in unholy patent materials, to insist on particular "styles," and to make its architect wish it had no "taste" at all, beyond that so clearly manifested in the choice of a professional adviser. Perhaps, however, Mr. Price will do it good; his philosophy is on sound lines, and, though clothed in a new and different phrasing, one recognises in it the old wholesome doctrines of Ruskin, Morris, and Street.

The author of this guide to those about to build says, in his preface, that he "treats a subject never before presented to the lay reader in a direct manner." He treats it under two headings—"A Practical Guide to Styles" and "A Practical Guide to Building." In "Styles" we begin with a glossary, admirably illustrated from the point of view of the inexpert person, who will find a photograph of a Classic entablature, with the names of its parts written thereon, less repellent than the cold geometric examples of Chambers. We proceed then to scamper through the ages, being made to realise how Providence has gradually led up by way of Egypt, Greece, Rome, and the Middle Ages to the varied American manner. (Incidentally, while the critic may be unable to dispute that "most English examples of Gothic do not show the spontaneity of the style as practised in France," he will, perhaps,

feel that the instance illustrated, Wren's towers at Westminster, is hardly convincing in itself.)

When we have been whirled into modernity and America the pace slackens, and interest grows with increase of detail. "Colonial" architecture is described as being of two types—Early Colonial, a homely thing of clap-boarding and gambrel roof; and Classic or Georgian Colonial, corniced, porticoed, and pompous. We are informed of the Creole variant of Louisiana, a much-balconied, slender-pillared style, evolved under French and Spanish influences. We read of the "mission" manner of California, of the Anglo-Pennsylvanian type, and realise that American architecture, like American literature, is a product of locality. We differentiate between the severe classic of McKim, Mead & White, and the balanced festivity of the Beaux-Arts School. Finally, we learn that "the great modern English architects have their influence and that their names are Voysey, Lutyens, Bidlake, Baillie-Scott, E. Norman Shaw, and Dawber."

There is apparently no one "American style." How should there be in a land of such vast distances, varied climates, and a mixed race with a habit of observant travel? Like ourselves, our cousins did not follow the Continental "New Art" syren, and the "European secession" has but few disciples; one could wish it had more if the work of Frank Lloyd Wright, on page 198, is a typical example.

In the main, America, though given to coquet with strange religions, seems in architecture to hold fast to orthodox faiths. In domestic work she may be said to be almost timid, the business man being apparently much in fear of home criticism and greatly sensitive to the uninformed appreciation of friends. The "skyscraper" is, of course, the most definite Transatlantic product, and its great height and complexity present fresh problems. But even these are solved on traditional lines, generally Classic. There is, however, an increasing tendency to attempt what is described as "a Gothic motion." This appears in the West Street Building, the Liberty Tower, and the fifty-storied Woolworth building of New York. Mr. Price advocates, for æsthetic reasons, this use of Gothic (which he says is nicknamed "Perpendicular architecture"); he feels it suits the aspiring nature of these "cathedrals of commerce"; possibly, too, the elimination of the great cornice, with its darkening effect on at least one floor, has its attraction for the practical mind. The newer type of tall building is planned with a "smoke proof" isolated staircase, approached by iron balconies from each floor, and there is a growing habit with building syndicates to purchase rights to light all round their sites. As a result of this the buildings are architecturally treated on each elevation, and New York is becoming a city of towers rather than of the colossal steps which have made Broadway into what has been described as "a convulsion rather than a street."

The second part of the book, the "Guide to Building," reveals difference between American and Eng-

lish procedure. A form of agreement between architect and client (issued by the American Institute of Architects) appears to be in common use. One or two of its clauses may be of general interest.

8. *Supervision of Work.*—The architect will endeavour to guard the owner against defects and deficiencies in the work of contractors, but he does not guarantee the performance of the contract. The supervision of an architect is to be distinguished from the continuous personal superintendence to be obtained by the employment of a clerk-of-the-works.

11. *Ownership of Drawings.*—Drawings and specifications as instruments of service are the property of the architect whether the work for which they are made be executed or not.

The American architect, too, seems more given, or more able, to employ specialists on his personal staff, specification writers, structural experts, supervisors, designers, and common draughtsmen! He uses $\frac{1}{4}$ -inch scale for working drawings and $\frac{3}{8}$ -inch or $1\frac{1}{2}$ -inch for details. He has, however, to be less lavish than his English brother with "sketches," for, to quote Mr. Price, "the average American client would expect to see his house completed before the English preliminary drawings were finished."

The "internal decorator," often a commercial firm, seems to be even a greater infliction than in England, and he deals with panelling, fireplaces, staircases and inserted antiques, as well as with tapestry, furniture and movable things; his activities are apparently more resented than those of the landscape gardener, who also flourishes.

Mr. Price gives some interesting information for the benefit of clients as to the relative costs of various types of construction in America. Assuming carriage to be in all cases the same, and the total expenditure 10,000 dollars—clap-board covered frame takes 945 for outer wall, frame and stucco 1,171, brick 2,217, stone 2,991, and "actual half timber" 3,491. One is pleased at the 3,491, for, though the American architect can produce a quite charming adaptation of an Italian villa, when he gets among "actual half timber" he is horrid! Over there they suffer, as we do here, from a lack of craftsmen who can be left alone occasionally to work out a building's salvation. I feel this most in Gothic work. Even in the fine churches of Cram, Goodhue & Ferguson the worshipper has to "endure hardness"; the unexpected seems to have been carefully arranged from headquarters, and the conscientious carver is felt to have seriously and faithfully carried out instructions to be quaint. The casual, unsophisticated, illiterate, poet-workman, who knew little about art and just enjoyed himself, has gone from America as well as England. "Education," machinery, unionism and commercialism have killed him. Can he be brought back to life, in a different form but with the same spirit, by the strong arm of the State or the pious efforts of societies?

To return to Mr. Price's book. Whether anything but the growing ages and the grace of God will lift up

popular taste is questionable, but this is an honest attempt, it is "very teaching," it will do the lay person, for whom it is intended, no harm, and both gentle and simple will enjoy the pictures.

HERBERT G. IBBERSON [F.].

CORRESPONDENCE.

Gothic Construction.

Eagle House, Wimbledon: 21 April, 1917.

To the Editor, JOURNAL R.I.B.A.—

SIR,—In these short-handed days I have not till now found time to reply to Mr. Moore's letter in your JOURNAL of February. Mr. Moore holds to his contention that there is no Gothic short of Amiens, where construction by equilibrium of forces is pushed to an extreme, and voids increased at the expense of solids to the utmost. He excludes from the style all that had been done before during the Middle Ages.

With due deference to Mr. Moore I submit that this, which at first sight seems merely playing with words, really involves a serious fallacy. The construction which alone he calls Gothic was not a new thing or an entirely different thing, but the final stage of a gradual progress, of which we know every step. To understand the construction of Amiens you must follow the course of architecture from Vezelay, St. Denis, Sens, and Senlis downwards. There is no break in continuity. Through the whole period it was the very same Gothic genius which worked step by step till it reached the final scientific result which satisfies Mr. Moore. To say that mediæval architecture suddenly becomes Gothic at Amiens is like saying that a boy suddenly becomes human when he becomes a man. I can suggest no other word but *Gothic* to cover the whole period of transition from Romanesque. So far from the construction at Amiens being something new or different from what had gone before, it is but a refinement of that in the earlier churches, or, indeed, of that in the Basilica of Maxentius.

Mr. Moore objects to my claiming the wall-rib as part of the wall and not of the vault. He says that in the clerestory at Amiens there is no wall, and the intervals between the piers are mere intercolumniations. This goes too far. The nave arches and triforium are as necessary there for stability as in the older churches; the window itself, though reaching from pier to pier, is the descendant of the more solid clerestories of Chartres, Laon, and Lisieux, and its arch carries and belongs to the solid wall which rises above to receive the wall-plate. At Winchester the side walls have gone outwards, carrying the wall-rib with them and leaving the vault behind, so that one could look down into the Church between wall-rib and panel. There can be no doubt there of the rib belonging to the wall. So in ruins of Gothic churches where the vaults have fallen the wall-rib remains in the side wall. Many vaults have

no wall-rib, the vault resting just as well on a set-off in the wall. The wall-rib is only a sort of cornice, and an ornament, to break the meeting of wall and vault.

Mr. Moore further objects to my tracing the tilting of the wall-rib to the need of leaving space for the window, on the ground that it was stilted at Laon, Paris, and elsewhere, though the clerestory windows took no advantage of the opportunity to expand. That is, no doubt, true. But the narrow side arch has to rise at its crown to the level of the wide transverse arches, and if Mr. Moore will try to strike the wall-rib without a stilt in the earlier clerestories he mentions he will find it would cut across the windows, narrow though they be, besides being unsightly from the contrast of its acuteness with the other arches.

In conclusion, I contend that the great Gothic movement in art will never be understood so long as attention is fixed only on its effect on the vault. There are many elements in Gothic architecture, such as subordination of orders, window tracery, application of ornament and statuary, which have no connexion in the world with stone ceilings. Had Amiens been ceiled with wood we might still have had its glorious porches. Had no Gothic vault ever been turned we might still have had the great East windows of Lincoln, Carlisle, Selby, and York, the spires of Chartres, Norwich, Lichfield, Senlis, and Salisbury, and the towers of Lincoln, Gloucester, and Canterbury. Mr. Moore however will contend that these are not Gothic, and there I am afraid we must leave him.—Your obedient servant,

T. G. JACKSON.

The Educational Conference.

3rd May 1917.

To the Editor, JOURNAL R.I.B.A.,—

SIR,—Is there not some danger of getting out of touch with reality in these discussions? A vague approval is apparently obtained for ideas which seem to be contradicted by experience, and I doubt if the individuals present would be responsible for their results in practice. Take the proposal to control students abroad. I sat opposite to a student whom I recalled nearly thirty years ago at a foreign capital as grousing at the task his very mild and distinguished director had imposed. It was then a wearisome piece of theorising. Similarly I recall, years ago, a prize winner, who wanted a task, being allotted a building to measure which I always go out of my way to see, one which to-day is in favour. The student reported to the governing body that he had been to see it and "saw nothing in it to draw." Wisely, as I think, he was then told to do what he liked, and the result gave great satisfaction.

I agree that a student will waste time, but his after regrets need not be taken seriously; if he has anything in him at all he will certainly do some work, which will mean much to him, if not to anyone else.

I believe Palladio was mentioned. Well, James Adam wrote of his visit to Vincenza in terms which

almost agreed with those of Street nearly a century later. Barry, however, thought it worth while to hire a crazy gig and, in spite of bad roads and worse information, hunted up the villas except two. I know what that must have meant, as I have been along the Brenta and to Wasa myself.

Viollet-le-Duc's memorable letter to his pupil, who after did so much to elucidate Roman building, charged him to avoid the Villa Medici and its methods. I only recall these things to illustrate how much care and tact is needed in dealing with the natural bent and initiative of the student—there are surely limits to the very popular line at the moment, "compulsion."

A. T. BOLTON [F.]

EDWARD GREENOP [F.].

Born 1861; died 1917.

By the recent death of Edward Greenop the R.I.B.A. has lost a useful and valued member. He was the third son of the late W. C. Greenop, solicitor; was educated at Dulwich College, and articled to Mr. John Morris [F.], of Gracechurch Street. He was elected Associate R.I.B.A. in 1885, and Fellow in 1913.

Mr. Greenop was the architect of large warehouse buildings in Tooley Street, a block of business premises in Giltspur Street, "Deal House," Englefield Green, extensive decorative work at 4, Park Street, W., and 19, Charles Street, W., besides numerous other works, and had a considerable practice in advising on and giving evidence in building cases, arbitrations, &c., in all of which his help, skill, judgment, tact and courtesy were acknowledged by everyone with whom he came into contact.

For many years Mr. Greenop was a member of the Practice Committee, of which he was Hon. Secretary for five years and Vice-Chairman at the time of his death; and the Committee looked forward to his taking the chair, a position he would have worthily filled, as his opinions on the work of the Committee were always sound and helpful. A Paper written by him and read at the Institute in December, 1911, on the "Responsibilities of Architects," was full of valuable information and advice to the profession. On the various sub-committees on which he served from time to time he gave excellent assistance, and did much work, particularly in connection with the new scale of charges and the revision of the terms of contract, in each of which he took a very keen and practical interest, his help being especially valuable on account of his knowledge of the legal aspect of these matters. He was also an acting member of the Board of Examiners and a member of the Council of the Architects' Benevolent Society.

In the numerous arbitration and building cases in which he was engaged he could always be relied upon for sound judgment, and was a most thorough

and conscientious worker. His loss is deeply felt by the numerous friends he had made at the R.I.B.A.

From its inception Mr. Greenop was associated with the 4th City of London Regt. of Volunteers, a corps started at the commencement of the war and largely composed of architects and surveyors, and he acted as secretary, in which capacity he continued to act when the corps was merged into the 1st London Engineer Volunteers. It is to be feared that his devotion to this work seriously affected his health and probably hastened his end, as he had for some years suffered from a weak heart. He died from pneumonia, following a chill caught after returning from some regimental work. His funeral took place at West Norwood, and was attended by the Colonel and other officers of the 1st L.E.V.'s and by the Chairman and other members of the Practice Committee. He leaves a widow and one son, aged fifteen.

W. HENRY WHITE [F.].

ALFRED WYATT PAPWORTH [A.].

Few men map out their lives while still in their early youth and succeed in carrying out their programme practically unaltered, and it was characteristic of Alfred Papworth that until he enlisted in the Artists' O.T.C. in August 1915 he had followed the career he had early planned for himself.

The younger son of the late Wyatt Papworth [F.], the eminent writer on architectural subjects and Curator of Sir John Soane's Museum, he was brought up in an architectural atmosphere which no doubt influenced him in choosing the profession for which his talents so well fitted him. We first met in the same tent on Farnborough Common in camp with the Artists' Rifles in the summer of 1900, and the close friendship begun there continued without a break until his death. Even in those early days his energetic nature would not allow him to take advantage of the rest permitted to those who had been on sentry duty at night and he did the day's work with the others. At that time he was in the office of the late Arthur Cates [F.], Surveyor to the Office of Woods and Forests, and was attending the School of Architecture at the Royal Academy, while in the limited spare time at his disposal he worked at his measured drawings of St. John's Church, Westminster, for which he obtained the Medal of Merit in the R.I.B.A. Measured Drawings Competition 1901. These drawings have since been exhibited at South Kensington Museum as examples of measured drawings.

Having been elected an Associate of the R.I.B.A., Papworth carried out his great wish to travel, spending three years in South Africa as assistant to Mr. C. H. Read, and a further two years in travelling round the world, making his expenses as he journeyed from place to place. He crossed both Northern and Southern India and visited some of the ports of China before settling for a time in Kobe in the office of a German

architect, after which he visited the chief cities in the United States before returning to London, where he intended to start in practice for himself; however, after working together for some time on occasional competitions we entered into partnership ten years ago, and it was the writer's privilege to be in close daily association with him.

Devoted to his profession Papworth disliked intensely any interference with his designs by commercially-minded clients, particularly when he had achieved something unusually original, but if strained relations resulted he always gave way with one of the witty remarks which, with his charming personality, endeared him to all brought into association with him. Disliking what appeared to him to be the annoyance of the business side of architecture, his sense of thoroughness, which he always attributed to the influence of Mr. Arthur Cates, rendered his reports and constructional designs exceptionally painstaking and brilliant.

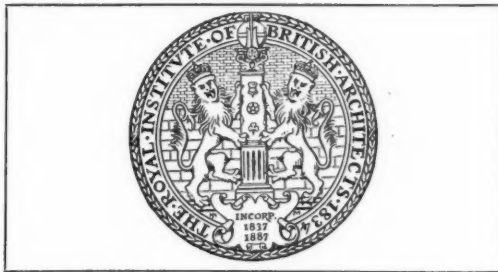
As a relaxation from the design of commercial buildings he entered into public and private competitions, although he rarely had the opportunity of completing his designs, but he looked upon the immense labour he devoted to his sketches as part of his training.

Always cheerful he had a smile and a jest for everyone, no amount of business worries depressing him, and he appears to have been just the same amid the miseries of a winter campaign, for his Commanding Officer wrote of him that "he was loved by his men and his brother officers for his kindly ways, his devotion to duty and his willingness to carry out to the last letter any orders received."

During the first year of the war he carried on our business much against his own inclination (the writer having been called up on mobilisation), but at last, saying he could stand it no longer, he enlisted in the Artists' O.T.C., where he had the chance of an appointment as instructor in map drawing. His sense of duty, which was very strongly developed, made him refuse this, and he chafed at the delay in being sent out, but after a period of special training, from which he passed out first in his class, he accepted a commission in the Royal Engineers. He was eventually sent to France at a day's notice on the anniversary of the date of his enlistment, and was attached to the 129th Field Company, meeting his death on 2nd April.

He did a considerable amount of work for the London Survey Committee, especially in the monograph on the Parish of Hammersmith recently published, was for some years a member of the Art Standing Committee of the R.I.B.A., Surveyor to the Licensing Justices for the division of Paddington, a liveryman of the Worshipful Company of Clothworkers, of which his father had been Master, and a member of the Savage Club. A tireless worker, he leaves the architectural profession the poorer by one whose great talents marked him out for a successful career and his circle of friends by a charming and lovable personality.

GILBERT H. LOVEGROVE [F.].



9 CONDUIT STREET, LONDON, W., 12th May 1917.

CHRONICLE.

The R.I.B.A. Record of Honour: Forty-third List.

Fallen in the War.

BLACKBURNE-DANIELL, 2nd Lieut. GEORGE FRANCIS [*Licentiate*], Royal Fusiliers. Killed in action on 24th April.

CALLENDER, Lieut. GEORGE WILFRED [*A.*]. Killed in action in Mesopotamia on 25th January last.

LOVELL, Lieut. CHARLES ERNEST [*A.*], Royal Engineers. Badly wounded on 21st March and died the same day.

SHEARS, REGINALD [*A.*], Queen Victoria's Rifles. Missing after an engagement on 1st July, 1916, now presumed by the War Office to have been killed.

Mr. Shears was elected an Associate in 1912. He joined the Colours in September 1914, was wounded in May 1916, and invalided home. Before returning to the Front in May last he was recommended for a Commission.

WARRY, Lieut. JOHN LUCAS [*A.*], Sherwood Foresters. Died of wounds in France on 27th April.

Lieut. Warry was elected an Associate in 1912. Joining the Artists' Rifles in the early days of the war, he was granted a commission in the Sherwood Foresters in July 1915. He served with his regiment in Ireland, and was on service there during the rebellion. Lieut. Warry was caught by a machine-gun whilst going to the assistance of a wounded brother officer during the action of the 27th April, and died on the way to the Base Hospital. His Commanding Officer writes: "Lieut. Warry was a brave man if ever there was one. He led his company right on to the German wire only twenty days ago, and came through unscathed. On the 27th his company were in the second wave, and I had hoped he would come through safely. If you could have seen the anxious way in which the men crowded round his stretcher you would have realised how they loved him. I should have sent in his name today for promotion to rank of captain had he lived, passing over others above him."

Members' Sons killed.

PEACH, Lieut. CRUGAR STANLEY, West Yorks Regt. and Royal Flying Corps. Accidentally killed on 28th April, aged twenty. Only son of Captain C. Stanley Peach [*F.*].

SOLOMON, 2nd Lieut. LEONARD, King's Own Scottish Borderers (Assoc. Member Institution of Electrical Engineers). Killed in action 23rd April, aged thirty-two. Son of Mr. Lewis Solomon [*F.*].

Serving with the Forces.

The following is the Forty-third List of Members, Licentiates, and Students R.I.B.A. serving with the Forces, the total to date being 74 Fellows, 518 Associates, 314 Licentiates, and 294 Students:—

FELLOWS.

Theakston, Ernest G.: Field Service Survey Coy., R.E.
Richmond, E. T.: Lieut., R.N.V.R.

ASSOCIATES.

Ellison, R. Kitching: Lieut., R.A.M.C.
Salwey, J. P.: O.T.C., Artists' Rifles.
Ebbs, E. H. Montague: 2nd Lieut., Roy. Garr. Art.
Goodwin, B. M.: Artists' Rifles.
Rowledge, G. H.

LICENTIATES.

Forbes, James: Lieut. and D.O. R.E.
Newman, C. J.: 2nd Lieut., King's Liverpool Regt.
Massey, Izmay: 2nd Lieut., Royal Flying Corps.

STUDENTS.

Sexton, G. W. F.: Survey Co., R.E.

Promotions and Appointments.

Hatchard-Smith, 2nd Lieut. W. H. [*A.*], Deputy Asst. Adjt. Quarter-Master Genl., 5th E. Surrey Regt.
Dartnall, Cadet J. A. [*Licentiate*], to 2nd Lieut., R.E.
Owen, Lieut. W. S. [*A.*], London Regt., to Captain.
Naylor, Sub-Lieut. James S. [*F.*], to Lieut., R.N.V.R.
Nicol, 2nd Lieut. G. Salwey [*A.*], K.R.R. Corps, to Lieut., R.E.
Bond, Lieut. A. P. [*A.*], D.A.D.R.T., to be Captain.
Kenchington, Herbert [*A.*], Civil Service Rifles, to 2nd Lieut., Machine Gun Corps.
Bluhm, Capt. Q. Mangnall [*A.*], Manchester Regt., to be Major.
White, 2nd Lieut. T. Hansford [*Student*], son of Mr. W. Henry White [*F.*], to Lieut., Duke of Cornwall's L.I.
Woodward, Lance-Corp. Frank [*A.*], son of Mr. Wm. Woodward [*F.*], has been gazetted 2nd Lieut., R.E.

Architects and National Service.

In reference to the appeal recently issued through the Press to architects who signed the National Service Form N.S.V. 1, the Architects' War Committee understand that the forms filled in by professional men who make their status clear under the heading "(e) Occupation" upon the form, are referred to a special branch of the Service, with its headquarters in London and branches in the provinces. In the case of such professional volunteers, unless they specially state under heading "(k)" that they are willing to do other than professional work, they will not be liable to take up manual labour or other service of a non-professional character. Should any demand of such a nature be made in error, the volunteer is at liberty to require that his form be referred to the nearest Professional Classes Branch Office, where the mistake would be rectified.

As suggested by Mr. Neville Chamberlain, a list of the services architects could render in the national cause has been drawn up and submitted to the National Service Department by the Architects' War Committee's Advisory Council. Intimation has been received from the Department that all Government Departments have now been notified that such services are at their disposal.

The Annual Elections: New Nominations.

The following nominations have been made by members in conformity with By-law 33:—

As Members of Council.

CLARKE: MAX [F.].

Nominated by George Hubbard, William G. Hunt, W. Henry White, W. Gillbee Scott, H. D. Searles-Wood, Wm. H. Atkin-Berry, Sydney Perks, Matt Garbutt, David Barclay Niven, *Fellows*; Percival M. Fraser, J. Douglas Scott, *Associates*.

SUTTON: ERNEST RICHARD ECKETT [F.].

Nominated by H. G. Watkins, John Howitt, Robert Evans, A. Ernest Heazell, *Fellows*; W. Brandreth Savidge, W. H. Swann, William R. Gleave, *Associates*.

MACKENZIE: ALEXANDER GEORGE ROBERTSON [F.].

Nominated by H. D. Searles-Wood, Henry M. Fletcher, Robert Atkinson, Horace Farquharson, *Fellows*; Robert Lowry, Fredk. R. Hiorns, Ernest Bates, *Associates*.

WHITE: WILLIAM HENRY [F.].

Nominated by Matt Garbutt, Max Clarke, Fred. M. Marks, Herbert A. Satchell, H. D. Searles-Wood, Wm. H. Atkin-Berry, David Barclay Niven, *Fellows*.

Attendances at Council and Standing Committee Meetings 1916-1917.

COUNCIL (10 Meetings).

Members of Council.—Ernest Newton, *President*, 8; H. V. Lanchester, *Vice-President*, 9; J. Alfred Gotch, *Vice-President*, 6; Sir John Burnet, *Vice-President*, 5; Paul Waterhouse, *Vice-President*, 7; Reginald Blomfield, *Past President*, 2; Thomas E. Collett, *Past President*, 1; E. Guy Dawber, *Hon. Secretary*, 8; S. D. Adshead, 6; Walter Cave, 6; H. P. Burke Downing, 10; W. Curtis Green (on service), 0; Henry T. Hare (on service), 2; E. Vincent Harris (on service), 0; Gerald C. Horsley, 7; J. J. Joass, 6; Arthur Keen, 9; D. Barclay Niven, 8; Alexander N. Paterson (Glasgow), 0; Andrew N. Prentice, 7; Harry Redfern (Government work), 0; A. E. Richardson, 2; E. A. Rickards (on service), 5; W. Gillbee Scott, 7; H. D. Searles-Wood, 9; Percy S. Worthington (Manchester), 2.

Associate Members.—Horace W. Cubitt (on service), 0; W. R. Davidge, 9; L. Rome Guthrie (on service), 0; Herbert Shepherd, 10; Philip E. Webb, 0 (killed in action); Herbert A. Welch (on service), 1.

Representatives of Allied Societies.—Graham C. Awdry, 0; R. Burns Dick (on service), 0; F. B. Dunkerley, 2; Chas. Kempson, 2; Adam F. Watson, 2; John Watson, 1.

Representative of Architectural Association.—H. Austen Hall (on service), 0.

STANDING COMMITTEES.

Art (4 Meetings).—E. Guy Dawber, 3; W. A. Forsyth, 0; J. Alfred Gotch, 1; Gerald C. Horsley, 1; Arthur Keen, 3; H. V. Lanchester, 0; Halsey Ricardo, 0; G. G. Scott, 0; H. H. Statham, 4; Edw. P. Warren (on service), 0; Robert Atkinson, 0; H. S. East, 3; L. Rome Guthrie, 0; Basil Oliver, 0; A. Wyatt Papworth, 0 (killed in action); Philip E. Webb, 0 (killed in action); Harry Redfern, 0; Harry Sirr, 0; H. P. Burke Downing, 4; Raymond Unwin, 0; W. A. Webb, 0.

Literature (4 Meetings).—Arthur T. Bolton, 4; D. Theodore Fyfe, 0; Andrew N. Prentice, 1; G. H. Fellowes Pryne, 0; A. E. Richardson, 0; E. A. Rickards (on service), 0; Chas. S. Spooner, 4; Arthur Stratton, 4; C. Harrison Townsend, 3; Paul Waterhouse, 0; M. S. Briggs (on service), 0; W. J. Davies, 4; Herbert Passmore, 1; S. C. Ramsey, 3; W. L. Spiers, 3; W. H. Ward (on service), 0; H. H. Wigglesworth, 2; C. E. Sayer, 4; H. A. Satchell, 3; H. G. Ibberson, 4; A. R. Jemmett, 0.

Practice (7 Meetings).—W. H. Atkin-Berry, 7; Max Clarke, 9; H. O. Cresswell, 0; A. W. S. Cross, 0; Matt Garbutt, 9; Edward Greenop (deceased), 8; George Hubbard, 6; D. Barclay Niven, 7; H. D. Searles-Wood, 12; A. Saxon Snell, 4; Horace W. Cubitt (on service), 0; Percival M. Fraser, 13; Edwin Gunn (on service), 0; H. A. Saul, 1; J. Douglas Scott, 7; Herbert Shepherd, 6; W. G. Hunt, 8; Alan E. Munby, 6; Sydney Perks, 7; W. Gillbee Scott, 10; W. Henry White, 12.

* Includes attendances at Sub-Committees.

Science (3 Meetings).—H. Percy Adams, 1; R. Stephen Ayling, 0; A. O. Collard, 3; Alfred Conder, 2; W. E. Vernon Crompton, 1; Bernard Dicksee, 3; Horace Cheston, 0; F. R. Farrow, 0; C. Stanley Peach (on service), 0; R. Elsey Smith, 2; R. J. Angel, 2; H. W. Burrows, 0; W. R. Davidge, 1; G. Leonard Elkington (on service), 0; Digby L. Solomon, 2; Ernest Flint, 0; O. C. Hills, 1; N. O. Searle (on service), 0; C. E. Varndell, 0; H. A. Welch (on service), 0.

The Architects' Benevolent Society.

Mr. Ernest Newton, A.R.A., President of the Society, addressing the Annual General Meeting on the 12th April, said:—In moving the adoption of the sixty-seventh Annual Report of the Architects' Benevolent Society I am, I think, in a position to congratulate the contributors on much useful work accomplished during the year. In consequence of the war the Society has undertaken larger responsibilities and has done its best to fulfil them. I need scarcely refer to the peculiar conditions in which the events of the past three years have placed architects, to the existing building regulations and so on, which have so seriously affected architectural practice. The outcome of this state of affairs has been to cause financial stress to men who otherwise had no reason to believe they would be faced with the difficulties and anxieties of tightening purses. The Architects' War Committee, as you know, at the outbreak of the war sought to devise measures to alleviate these difficulties; the Civic Survey Joint Committee was also formed with the same purpose. An appeal was made to the profession for funds in the case of the former Committee, and the Civic Survey Joint Committee was successful in obtaining the financial support of the Government Committee on the Prevention and Relief of Distress. The money which has been received in both cases, amounting altogether to a considerable sum, has been administered by this Society. In addition to these spheres of activity there has been the ordinary philanthropic work independent of any causes created by the war. In connection with the general funds of the Society it is satisfactory to note that, notwithstanding the stress of present times, there was practically no falling off in subscriptions as compared with the previous year, while over £300 was received in donations. It has been the aim of the Council for many years to extend the list of subscribers. The result is perhaps scarcely a matter for congratulation. Certainly we could do with more general support; but the sustained loyalty of our general body of subscribers is a matter for congratulation. If we have not been able to add many names to the list of subscribers, we have, at any rate, the satisfaction of knowing that very few names have been withdrawn. It is a fact that our largest bequest and donations during the history of the Society have been received from those who have been most familiar with its sphere of operations. I mention this with a view to engaging the sympathy and liberality of those who have so far refrained from sending us their contributions. We all know how severely architects have suffered in consequence of the war; we also know that there are many architects whose practices have rarely been so profitable. I should like to make a very special appeal to these latter gentlemen, either on behalf of this Society or on behalf of the Architects' War Committee whose funds it administers. It is satisfactory



JAMES ELLIS BRAITHWAITE, *Associate*.
Private, West Yorks Regiment.
Died of wounds (see p. 12).



Lieut. JAMES BENNETT, *Associate*.
Royal Engineers.
Killed in action (see p. 78).



CORPORAL ROBERT VICTOR STURGEON, *Associate*.
17th Manchester Regiment.
Killed in action (see p. 78).



ARTHUR CYRIL CAUDWELL, *Licentiate*.
Private, Queen's Westminster Rifles.
Killed in action (see p. 29).

to know that the Society works in harmonious co-operation not only with the Committees I have already referred to, but also with the Professional Classes War Relief Council and the Artists' General Benevolent Institution. Successful co-operation of this kind is useful in preventing overlapping. It also helps to give assistance which extends beyond immediate financial aid. My last word in moving the adoption of the Report shall be again to appeal to such of our professional brethren from whom we have so far received no practical support to contribute to our funds, as I am sure they realise that contributions were never more needed than at the present time.

MINUTES.

At the Eighty-third Annual General Meeting, held Monday, 7th May, at 5.30.—Present, Mr. Ernest Newton, A.R.A., *President*, in the Chair; 24 Fellows (including 10 members of the Council), 10 Associates (including 2 members of the Council), and 4 Licentiates—the Minutes of the meeting held 5th March having been published in the *JOURNAL*, were taken as read and signed as correct.

The Hon. Secretary announced that since the last meeting it had been reported that the following members had fallen in the War:—2nd Lieut. Alfred Wyatt Papworth, R.E. [A.], William Jackson Pywell, Hon. Artillery Company [A.], Lieut. Charles Ernest Lovell, R.E. [A.], Reginald Shears, Queen Victoria's Rifles [A.], 2nd Lieut. John Lucas Warry [A.], and Henry Eustace Adams, Rifle Brigade [Student]. On the motion of the Hon. Secretary, it was resolved that the deepest regrets of the Institute for the loss of these members be recorded in the Minutes, and that a message of sympathy and condolence be forwarded to their relatives.

It was also resolved that letters of sympathy be addressed on behalf of the Institute to Capt. Stanley Peach [F.] and Lewis Solomon [F.] who had recently lost sons in the war.

Further, the decease was announced of Edward Greenop [F.] and Walter Augustus Hills (for many years a Fellow of the Institute), and it was resolved that letters of sympathy and condolence be addressed to Mr. Greenop's widow and to Mr. Osborn C. Hills [F.], son of the late Mr. W. A. Hills.

Arthur Edward Gurney, *Licentiate*, attending for the first time since his election, was formally admitted.

The Assistant Secretary announced that the following candidates had been nominated for election:—As Fellows (5): John Wayland Benwell [A.], Percival Maurice Fraser [A.], Alfred John Healey [A.], Ernest Grigg Heathcote [Licentiate]; passed the Examination qualifying for candidature as Fellow, Colonel Alfred Spain, V.D. [A.]. As Associates (4): Andrew Blayney Hamilton, Wellington, N.Z.; Cecil John Harvey Keeley, Melbourne; Captain Basil White Ridley; Thomas Blair Moncrieff Wightman, Brisbane. As Honorary Associate: Joseph Pennell.

On the motion of the President, it was resolved that the congratulations of the Institute be tendered to Sir Ernest George, *Past President* and *Royal Gold Medallist*, upon his election as Royal Academician.

The President formally moved the adoption of the Annual Report for the official year 1916-17.

Mr. E. Guy Dawber, *Hon. Secretary*, seconded.

In the discussion* which ensued, the following members took part:—Mr. John Slater [F.], Mr. Wm. Woodward [F.], Mr. H. D. Searles-Wood [F.], Mr. Sydney Perks, F.S.A. [F.], Sir Aston Webb, K.C.V.O., C.B., R.A. [F.], Mr. W. R. Davidge [A.], Mr. Max Clarke [F.], Mr. H. Hardwicke Langston [A.], and the President.

Sir Aston Webb, Chairman of the Charing Cross Bridge Joint Committee, at the request of the President, replied

to criticism by Mr. Perks respecting the withdrawal of the Joint Committee's petition to the South-Eastern and Chatham Railway Company's Bill for the strengthening of Charing Cross Railway Bridge, and upon the motion of the President, seconded by Mr. Davidge, a vote of thanks was passed by acclamation to Sir Aston for the great amount of time and care he had devoted to the work of the Committee in relation to the above-mentioned Bill.

The Annual Report was then put to the meeting and carried unanimously.

A vote of thanks was passed to Mr. R. Stephen Ayling [F.] and Mr. A. W. Sheppard [A.] for their labours in connection with the annual audit, and Mr. H. A. Saul [F.] and Mr. H. S. East [A.] were nominated Auditors for the ensuing year of office.

The President referred with warm appreciation to the self-sacrificing labours of Mr. Alan E. Munby [F.], Colonel Leslie, Mr. Walter Tapper [F.] and Mr. Arthur Keen [F.] in connection with the work of the Architects' War Committee, and it was resolved that the cordial thanks of the Institute be tendered to them.

On the motion of the President a vote of thanks was passed by acclamation to the Assistant Secretary, the Librarian, and the Editor for their able conduct of the work of the Institute under the difficult conditions resulting from the reduction of the staff.

The meeting separated at 7.30 p.m.

NOTICES.

A GENERAL MEETING (BUSINESS) will be held Monday, 11th June, 1917, at 5.30 p.m. for the following purposes:—

To read the Minutes of the Annual General Meeting held Monday, 7th May, 1917; formally to admit members attending for the first time since their election, &c.

To receive the Report of the Scrutineers appointed to direct the election of the Council, Standing Committees, &c., for the year of office 1917-18.

To proceed with the election of the candidates for membership whose names are set out in the *JOURNAL* for April, page 152.

INFORMAL CONFERENCE, 16TH MAY, AT 3.30 P.M.—“Co-operation in Design.”—Opener, Mr. A. R. Jemmett [F.]. Chairman, Mr. Alfred S. Cross [F.].

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* The report of the discussion will appear in the next issue.

